



HISTORY OF CHRISTIAN EDUCATION



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St. Francis Xavier

(Detail from the "Miracles of St. Francis Xavier" by Rubens)



HISTORY OF CHRISTIAN EDUCATION

BY
PIERRE J. MARIQUE, Pd.D., Ph.D.

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PREFACE

This volume, the second one of the series on the History of Christian Education, covers that period of four hundred years, from the fourteenth to the eighteenth century, which is quite commonly included in what is termed modern times, but would be more adequately described as a period of transition, an age possessing some of the characteristics of modern times while preserving many mediæval traits.

The plan of treatment is similar to that followed in the first volume. The matter of the successive chapters is presented in such a way as to form a concrete, connected narrative, and to give to the reader at the same time a suitable background of general and related information. The history of education is nothing else, after all, than one aspect of the history of the race, and we understand it only to the extent that we see it in its social, political and cultural setting and realize the educative value of the various agencies which form the educational system of any period or nation.

It is for that reason that each of the great movements under consideration is first treated in a general way before any attempt is made at describing its influence upon the schools. is for that reason too, that many a topic and many a name appear in these pages that are not usually found under the heading of education. The labors of missionaries, for instance, amidst the privations, the hardships and dangers of the American wilds were no less educative in their own way and they are no less worthy of record than the life and labors of an Erasmus or Comenius. And the hope might be entertained that even a brief mention in a book of this kind of the trials and heroism of a Francis Xavier or Isaac Jogues, gladly forsaking their full share of earthly comfort in order to devote their lives to the spiritual uplift of their fellowmen, will contribute something towards a realization of the true meaning of education.

iv Preface

Like the preceding volume, the present one can be used either as a reference work, or as a text-book with classes that make a more comprehensive study of the history of education. If the latter plan be adopted, the lists of sources, references and topics for discussion to be found at the end of each chapter would supply ample materials for work in educational seminars. But whatever the particular purpose for which the book might be used, it is the earnest hope of the author that it be an incentive to much collateral reading, especially of sources, the surest way, if not the only one, of reaching an adequate conception of our indebtedness to the past.

PIERRE J. MARIQUE.

New York, August 15, 1926.

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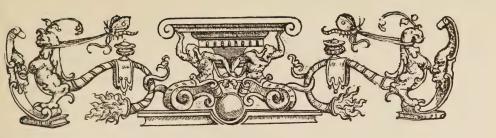
GENERAL BIBLIOGRAPHY

General Histories of Education.

- 1. Cubberly, E. P., The History of Education, Readings in History of Education, 2 Vols. New York, 1920.
- 2. Davidson, Thomas, History of Education. New York, 1900.
- 3. Graves, F. P., A History of Education, 3 Vols. New York, 1913.
- 4. McCormick, P., History of Education. Washington, 1915.
- 5. Monroe, Paul, Text Book in the History of Education. New York, 1909.
- 6. Schmid. K. A., Geschichte der Erziehung vom Anfang an bis auf unsere Zeit. 5 Vols. Stuttgart, 1884-1902.

Bibliographies, Cyclopedias, Magazines.

- 1. American Journal of Education. (Henry Barnard, Ed.) 31 Vols. Syracuse, 1902.
- 2. Bibliothek der katholischen Pädagogik. (F. X. Kuntz, Ed.) 14 Vols. Freiburg, 1888-1902.
- 3. Catholic Encyclopedia. 16 Vols. New York, 1907-1914.
- 4. Cyclopedia of Education. (Paul Monroe, Ed.) 5 Vols. New York, 1911-1913.
- 5. Dictionnaire de Pédagogie et d'Instruction primaire. (F. Buisson, Ed.) 2 Vols. Paris, 1886-1887.
- Encyklopädisches Handbuch der Pädagogik. (G. W. Rein, Ed.) 7 Vols. Langensalza, 1895-1899.
- 7. Lexikon der Pädagogik. (E. M. Roloff, Ed.) 5 Vols. Freiburg, 1913.
- 8. Sammlung der bedeutendsten pädagogischen Schriften aus alter und neuer Zeit. (Schulz, Gansen and Keller, Eds.) 28 Vols. Paderborn, 1888-1902.
- 9. Syllabus of Lectures on the History of Education, by E. P. Cubberly. New York, 1904.



CHAPTER I

THE PASSING OF THE MIDDLE AGES



ETROSPECT. In its spiritual conquest of the Christianity world Christianity came first into contact with the highly civilized races of the Roman Empire, and in spite of its bold challenge to almost everything that was prized by the pagan, in spite of persecutions and heresies, it spread with won-

vs. Paganism.

derful rapidity. The Church had begun in an obscure corner of the Roman Empire, as a small community of a few hundred followers of Christ, "an outcast sect of an outcast race;" at the end of the first century Christian communities were to be found in practically every province of the Empire, and by the beginning of the fourth it was evident that the Church was to be the society of the future.

Paganism was dying out, and with it the inspiration which had produced the masterpieces of pagan art and literature. Few writers of even second rank appeared after the second century; the best ones were "rhetors" like Libanius or poets of the type of Rutilius Numantianus.² Artists had become so scarce that Constantine³ was compelled to plunder several cities

¹Libanius, a famous rhetor of the fourth century, who numbered St. John Chrysostom among his pupils.

²Rutilius Numantianus, a pagan Gaul, prefect of Rome about 413, described his return to Gaul in a rather long and dull poem, "Upon

³ Constantine the Great, the first Christian emperor, transferred the capital of the Roman Empire from Rome to his new city of Constantinople.

of their art treasures in order to adorn his new capital on the Bosphorus. It is true that grammarians and rhetors were now held in highest esteem, enjoyed many privileges and received good salaries from the imperial treasury; it is also true that schools were flourishing as never before in the Roman Empire, especially in Gaul, where some cities remained centers of classical learning long after the fall of the Empire; but the work of these schools was of the most formal, artificial character, aiming at a type of shallow, degenerate culture, which had become one of the badges of distinction for an idle, superannuated nobility.

In striking contrast with this dying society and its lifeless culture, stands before us, full of life and rich promises for the future, the young Christian society. Christian literature had taken firm root in the classical tradition, and it was full of vigor, not only because it derived its inspiration from the everflowing fountain of Christian Faith, Hope and Charity, but also because it ever remained in close contact with the realities of life; we need only mention here the names of St. John Chrysostom, St. Basil the Great, St. Gregory of Nazianzus, Tertullian, St. Ambrose, St. Jerome, and the greatest of them all, St. Augustine.¹ Eighteen councils held in the fourth century alone bear an eloquent testimony to the vitality of the young Church and the never-flagging interest which Popes and bishops took in the welfare of the Christian family. By the end of the fifth century the Church had practically completed her organization; she had assimilated and spiritualized what deserved to be preserved from pagan culture, and thus laid the foundation for a new and higher civilization. When the Roman imperial structure collapsed, she alone stood erect, unscathed amidst the ruins, ready to receive and lead to Christ the young, vigorous, unsophisticated Northern races.

At first, however, it looked as though the coming of the Barbarians had dealt a death-blow to western civilization. Many

¹ See V. I, ch. I.

cities, once flourishing and wealthy, were now in ruins,1 and there were in every province scores of deserted villages and towns. Large tracts of land which had been cultivated for centuries were becoming wild; the knowledge of the useful arts was fast disappearing; even agriculture, which the Italians had brought to such a high degree of perfection, had become of the most rudimentary character; industry and commerce had died out and intercommunication largely ceased. Libraries and works of art had been scattered or destroyed, and by the end of the sixth century the old schools with their teachers had disappeared, the traditions of refinement and culture were gone, and, what was worse, the clergy, now beginning to be recruited from the new-comers, was feeling the influence of their gross ignorance and coarseness. The new ruling class had nothing but proud disdain for schools and letters; few of them could even sign their own names. Worse still than this economic and intellectual decay was the condition of morality. A state of chronic warfare, bringing in its trail misery, want and general insecurity, had loosened all restraints and given free scope to vice and crime.

Recovery from such a state of barbarism was a long, weary process, which lasted through the greater part of the Middle The Church Ages and was brought about by the Church, the only surviving and social force capable of such a task of reconstruction. With an energy and perseverance born of her zeal for the salvation of souls, the Church undertook the conversion and education of the fierce Northern Barbarians, just as she had, five centuries before, undertaken the conversion and education to Christian ideals of a refined but corrupt society. Her own organization, into which had been incorporated some of the elements of the old imperial constitution,2 became the framework of the new society, the great Christian family of nations. Her bishops and priests, the only educated men of the time, became the

reconstruction

been made a basis for ecclesiastical administration.

¹ Rome was sacked three times, Trèves, five times, in the course of a century. See references given on p. 91, Vol. I.
² Thus, for example, the political division of the Roman Empire had

councilors and secretaries of the barbarian rulers, and not infrequently were entrusted with the government of cities, where the population had remained predominantly Gallo-Roman. this way they not only succeeded in mitigating the lot of the conquered, but also in preserving much of the old Roman law and institutions. Missionaries went among the heathen tribes, not only in their new settlements, but far into the barbarian forests; they built churches, organized parishes and founded monasteries which, more than anything else, contributed to reclaim Europe from barbarism. In the full sense of the term the monks became the pioneers of civilization wherever they had settlements, and such settlements were established by the tens of thousands in the seventh and following centuries. The monks became expert farmers and artisans, and it was from them that the laboring class learnt anew the useful arts. More important still for the education of the surrounding population was the example of the monks' piety and charity, their austerities, the simplicity of their diet and clothing, their hospitality to the wayfarer; above all, the example of their obedience to rule, of their labors and of the truly democratic spirit which pervaded their well-regulated community life. Monasteries were also for centuries the only shelters of learning, of literature, art and science, the only nurseries of intellectual and spiritual leaders. It was in monastic schools that the splendid revival of learning in the twelfth and thirteenth centuries was prepared. Two other institutions, born of Christianity, chivalry and the gild, contributed much to the work of social reconstruction. What monasticism was doing for the industrial training of the peasant class, everywhere for the religious and intellectual life of the time, the gild did for industrial city life, and chivalry for the political and military life of the Middle Ages. They exercised a restraining, civilizing influence on the rude populations of the North; they developed an ability to work together under common leaders, for a common purpose, in a well-ordered life, and they set up, before noble and artisan alike, an ideal of perfection which they had never known be-

through monasticism,

the gild and chivalry.

fore. The fruit of generations of toil and slow progress appeared in the life and splendid achievements of the thirteenth, the Christian century par excellence, the century of Innocent III and St. Louis IX, of St. Francis and St. Dominic, of St. Thomas Aquinas and Roger Bacon, of Cimabue and Dante.1 It was in that century that mediæval art reached its full development in the beautiful Gothic Cathedral, that the first noteworthy productions in the new western languages appeared, that the modern University was founded, that the modern democratic spirit showed the first signs of its rise in the West.

The Beginnings of a New Era. With the fourteenth cen- The beginnings tury a new period began in the history of the western world. of modern The removal of the Papal residence from Rome to Avignon, in Southern France, deeply altered the relations which for centuries had obtained between Church and State. It lowered the prestige of the Holy See in the eyes of many, by making it appear that the Pope was now held in tutelage by the King of France; then, too, the excessive exercise, by some of the Avignon Popes,² of their right to levy taxes on Church property, together with their prodigality and the luxury of the Papal court,3 which was imitated by many members of the clergy, aroused in many quarters strong protests and demands for reform in the Church. The great Western Schism (1378-1417), which followed the return of the Papacy to Rome and brought such frightful confusion upon Christendom, lowered still more the prestige of the Holy See in the eyes of many nations. The Schism was brought to an end through the exertions of Emperor Sigismund (1410-1437) and the action of the Council of Constance (1414-1418), which also issued a number of decrees aiming at the removal of abuses in the Church. Unfortunately no serious result followed, and the work of reform within the

¹ See V. I, ch. VI and VIII.

² John XXII, Clement VI, Gregory XI.

³ That is particularly true of the pontificate of Clement VI. His saintly successors, Innocent VI and Urban V, did their utmost to reform these abuses.

Church did not begin in earnest until a century later, with the Council of Trent.¹ Coincident with the Papal residence at Avignon and the Great Schism, there took place in England and Bohemia a movement of revolt against ecclesiastical and civil authority. It had its origin in the teachings of John Wyclif² and John Hus,³ sometimes referred to as the precursors of Protestantism. Many of their teachings, notably those concerning the private interpretation of the Scriptures, the Sacraments, predestination, the veneration of the Saints, and the Papacy, were reproduced with some variations and propagated by the Protestant reformers in the sixteenth century.

The rise of the burgher class.

Along with this religious unrest, signs were not wanting of a great change taking place in the social and political life of the West. Feudalism was slowly making way everywhere for a new order of things. Trade and industry had immensely increased in all lands, and there had developed a new class of merchants and artisans, a class of city burghers or "Third Estate," which was now taking its place by the side of the nobility and clergy. The wealth of these burghers and their strong organization into gilds gave them great influence in the affairs of their cities. Such was particularly the case in northern Italy, where, in the course of the twelfth and thirteenth centuries, many cities had become independent republics, whose government was in the hands of their merchants and artisans. These Italian republics had united in the struggle for Italian independence so long as it had been threatened by the German kaisers, but once the danger was over, they were driven apart by local rivalries, or torn by factions in each city, and a long period of internecine quarrels followed. When it came to an

¹ See ch. VI.

² John Wyclif, a professor at the University of Oxford, later vicar of Lutterworth, taught his doctrines about the year 1380, and in order to spread them far and wide organized his "poor priests," sometimes called Lollards, from a word meaning "to sing in a low voice."

⁸ John Hus, a professor at the University of Prague, had become acquainted with the doctrines of Wyclif through Jerome of Prague, an Oxford scholar. These doctrines spread through Bohemia with incredible rapidity and were the cause of the bloody Hussite Wars.

end, free local government had disappeared from the peninsula; in its place there were now purely aristocratic republics, as in Genoa and Venice or, as in Milan, petty principalities, founded by the condottieri,1 to whom factions and cities had appealed in the struggle for supremacy. A similar fate, though circumstances somewhat differed, was to overtake a little later the free cities in the Netherlands and Germany. In England, feudalism was passing into the parliamentary form of government. In their fight to curtail the power of the king, the English barons had made an alliance with the clergy and burghers, and this union had produced a measure of political liberty for all. In France, on the other hand, where the royal power was The passing originally weak, the kings had made an alliance with the burgh- of feudalism. ers against their common enemies, the barons. Unfortunately, the burghers failed to offer a united front in their bargainings with the throne, and, when the struggle against the feudal lords was over, the king's power had practically become absolute. In Germany the struggle between the central government and the feudal lords had the opposite result; the sovereign was left with the mere shadow of authority, and the Empire broken up into hundreds of practically independent cities or petty states whose government was rapidly becoming autocratic. This tendency towards absolutism is noticeable everywhere on the continent at the beginning of the fifteenth century, and it coincides with the rise of the national spirit, which The rise of is asserting itself more and more as the Middle Ages are draw- the national ing to a close. In place of the one great Christian family of the twelfth and thirteenth centuries there were to be now. Englishmen, Frenchmen, Germans, Italians, Spaniards, etc. During the Avignonese period and the Great Schism this national individualism became evident in the religious life of the West; the wars for Italian independence and the Hundred Years' War brought it out in political life, but nowhere else was it

¹ The condottieri were adventurers of the 14th and 15th centuries who commanded bands of mercenaries on their own account and hired out their services to sovereigns and states.

had found its expression in Latin, the language of the Church

and literature; now Latin was being supplanted by other languages which had developed slowly as spoken idioms and were now reaching the literary stage. Italian was the first one to come to that stage; in fact, it had attained literary perfection before the close of the thirteenth century and it was used with remarkable effectiveness in poetry by Dante and Petrarch,1 and a little later by Boccaccio² in prose. French was less precocious than Italian, but it showed a more spontaneous and more varied literary production; English, the result of the fusion of Old Saxon and Romance dialects, received official recognition over French in England in 1362, and at about the same time appeared its first great literary achievement, the Canterbury Tales.3 Spain had already produced the Romancero del Cid,4 and Portugal had developed that wonderful story of Inez of Castro, which Camoens⁵ was later on to immortalize in his lines. Germany had had her Minnesingers and Meistersingers,6 and was perfecting her prose; slowest in this national literary movement were the Scandinavians, Slavs and Hungarians. Architecture was still distinctly mediæval, i. e., Gothic, but it betrayed a desire to please which had been entirely foreign to the earlier style; in spite of their great elegance of details, the Gothic monuments of the period lack the impres-

Artistic evolution.

and national

literatures.

¹ See ch. III.

siveness of the earlier ones. Nevertheless, fourteenth century art is still deeply and sincerely religious, still showing the greatest reverence for all religious subjects. Such is the im-

² Ibid.

³ The work of Geoffrey Chaucer (c. 1340-1400), the first great English

El Cid (Rodrigo, Diaz, Count of Bivar), the national hero of Spain in the eleventh century.

⁵ Camoens (Luis Vaz de) (1525-1580), the greatest Portuguese poet, the author of "The Lusiads." One of the most interesting episodes of this epic is the story of Inez of Castro.

^o See V. I, p. 131.

pression that one inevitably receives from the frescoes of Giotto and Fra Angelico. 1 During the latter's life-time oil painting began to become general. Oil had been used in painting before, but never extensively, because there was no known process of rapid drying. Around 1400 the Van Eycks, the founders of the Flemish school of painting, began to use in their work a siccative oil which had been known in Flanders for some time, but had never been used in painting. A little before this time another revolution had taken place in the art of warfare through the use of gun-powder, which Europe seems to have received from the Saracens. Greater still, and certainly far more beneficent for civilization, was the revolution brought about in the art of navigation through the mariner's compass, which is said to have come to Europe from the discoveries. Chinese in the thirteenth century. Navigators were now no longer tied to the coast; they could boldly venture into the open sea, in search of new trade routes and new continents.

QUESTIONS FOR DISCUSSIONS

- 1. Account for the weakening of the central government in Germany. 2. What was likely to be the result upon the schools of the tendency
- towards local government in German lands? 3. What was the influence of the Great Schism upon the universities?
- 4. What was the effect of the Hundred Years' War upon the French schools?
- 5. Compare as to aims and ideals chivalric education in the twelfth and fourteenth centuries.
- 6. What was likely to be the result for the city schools of the rise of the burgher class?
- 7. What was the effect upon chivalric education of the invention of fire-arms?
- 8. What differences, if any, are noticeable in the fourteenth century between (a) the Italian and German universities, (b) the English and the French universities?
- 9. What was likely to be the effect upon the schools of the tendency towards nationalism?
- 10. What were the results for the Italian schools of the Papal residence at Avignon?
- Giotto and Fra Angelico, leading Italian painters of the 13th and 14th centuries, respectively.

SOURCES.

See Vol. I, especially ch. I, III, IV, VI. Henderson, E. F., Historical Documents of the Middle Ages. Ogg, F. A., Source Book of Mediæval History. Robinson, J. H., Readings in European History.

REFERENCES.

See Vol. I, especially ch. I, III, IV, VI. Duruy, V., History of France.
Gardiner, S. R., History of England.
Henderson, E. F., History of Germany in the Middle Ages.
Hergenroether, J., Church History.
Pastor-Antrobus, History of the Popes.



THE TEMPLE OF SOLOMON

CHAPTER II

THE RENAISSANCE

HAT Made the Renaissance Possible. It is The term rather unfortunate that usage, following in the footsteps of prejudice, has fastened upon the transition movement of the fifteenth and sixteenth centuries a name which is open to serious misconceptions. The Renaissance was not, as the

Mediæval linguistic studies.

term would suggest, a rediscovery of something which had been lost, a period of enlightenment following one of intellectual darkness. Mediæval intellectual life was as vigorous as it was many-sided, and never was it out of touch with antiquity. Latin, in so far, at least, as the educated classes were concerned, never was a dead language in the Middle Ages. It was not only the language of the Church, of the school and scientific literature, but also that of public life and diplomatic intercourse. The study of Greek, though never a real element of mediæval education, was not entirely neglected. John Scotus Erigena,1 who was head of the Frankish Palace School of Paris about 845, was well versed in Greek literature and philosophy, which he had learned in the Irish schools; the Greek scholar, Theodore of Tarsus, who became primate of England in the seventh century, encouraged the study of Greek, which remained popular in the English schools a long time after his death; the monk Gerbert,² who was for several years in charge of the cathedral school of Rheims and in 999 became Pope Sylvester II, was, like Erigena, well versed in Greek philosophy. Scholasticism, accepting, as it did, many of the teachings of Plato and Aris-

¹ See Vol. I, pp. 109, 162. ² See Vol. I, p. 87.

totle, could not but encourage among the Schoolmen the study of the Greek text which began in earnest in the second half of the thirteenth century and thus prepared the way for the work of the fifteenth century humanists. The beauty of Greek art and Greek poetry was not, it is true, appreciated by the Middle Ages, but the period fully grasped the meaning of Greek thought, which it incorporated into its own system of philosophy. The study of Hebrew was much rarer than that of Greek. Lanfranc¹ is said to have taught the language in his school at Bec in the eleventh century and mention is made of a few teachers of Hebrew at the University of Paris, but these seem to have been exceptions; race prejudice for a long time barred the language from Christian schools. Arabic was well known and widely studied during the Middle Ages, because it gave access to a rich scientific literature and was the living language of a civilized people with whom the Christians entertained constant relations. Like Arabian learning, the Arabian language exercised on the western nations a remarkable influence, traces of which are still to be seen in many words used even to-day: elixir, talisman, algebra, magazine, alcohol, arsenal, etc.

Mediæval education received its content from the two main sources of mediæval civilization. Christianity contributed the religious element which was the core of mediæval education and, in the form of theology, the capstone of higher education. Classical antiquity contributed the subjects which were thought to be necessary for a liberal education, *i.e.*, the seven liberal arts: grammar, dialectic (logic), rhetoric which formed the trivium, and arithmetic, geometry, music and astronomy which formed the quadrivium.² In present-day educational parlance the mediæval secondary school curriculum consisted of lan-

The seven liberal arts;

¹ Lanfranc (1005-1089), abbot of Bec in Normandy, later archbishop of Canterbury.

² Advanced instruction in music was treated as a branch of mathematics, and what we call natural science came under the heading of astronomy, though some was given in connection with geography, a branch of geometry.



THE CAMP OF WISDOM

guage, mathematics and science proper, all preparatory to the study of philosophy and theology. These studies were taken up in succession, on the principle of a sound psychological gradation very akin to that of Plato's scheme in his *Republic*. The whole plan is well described in the following passage:

"In the educational scheme the various subjects of learning had a definite relationship and a co-ordination that is sadly lacking in education to-day. Whatever studies had been added by the Scholastics to the curriculum did not crowd out the older nor take from their importance. There always remained the Temple of Learning, or the Tower of Wisdom, with all the subjects in their respective places. A story could be added to it without disturbing the order. This Temple of Learning is, by the way, a fine example of the co-ordination in studies dear to the popular imagination of the Middle Ages. It is found in the allegories and poems typifying ascent or advance in learning, just as in the spiritual works the Ladder of Perfection typified ascent in virtue. In the Temple of Learning are represented the unity and the co-ordination of knowledge. The boy is admitted to it by Wisdom when his letters have been learnt, and then by definite stages or grades he mounts upwards; through Grammar on the first and second floors; through Logic and Rhetoric, or the rest of the Trivium on the third; through Music, Geometry, Astronomy on the fourth; through Philosophy and Physics on the fifth, until finally at the summit or in the Tower he learns Theology, the Truth which tells of God." 1

and relative importance.

their

gradation

Though the several liberal arts were all looked upon as part of an organic whole, they were not regarded as of equal value. The quadrivium never was as popular as the trivium which formed practically, in the narrow sense of the term, the cultural element of mediæval education. In the pre-scholastic period the "trivial" subjects which were mostly studied were grammar and rhetoric. Grammar was considered the foundation of a liberal education because it taught the correct use of the mediæval school language, Latin, and the interpretation of the texts which included sacred literature and the classics. Among the latter Virgil, Seneca, Horace seem to have been quite popular, though other classics were also read. Thus, in addition to the preceding, Gerbert used in his schools Terence, Juvenal, Lucan, Cicero, Cæsar, Sallust. Like grammar, rhetoric was chiefly studied for the help it afforded in the inter-

¹ McCormick, P. J., History of Education, p. 128.

pretation of the texts. The Middle Ages never evinced for mere style the same interest as Rome in antiquity and the Renaissance in modern times. The schools strove to preserve the purity of the Latin tongue, but oftentimes failed to appreciate the difference between low and classical Latin.

After the recovery of the whole Organum¹ of Aristotle and the revival of the study of speculative theology, the study of logic, rather than that of grammar and rhetoric, became the main preparation for that of the theological science. Logic, at this time, was not only increased with a whole apparatus of formulas for distinguishing, defining, proving and systematizing, but it became the nucleus around which grew and developed the whole system of scholastic philosophy. Literary studies fell into the background, though in some places grammar and the classics retained their hold on teachers and pupils.²

Though history did not figure among the mediæval school History and subjects, the age was interested in the records of the past. The the natural sciences. early histories of the Church were widely used, much of the ancient Roman history was known and taken as a model and

Organum, or Organon in the Greek form, the body of logical doctrine as conceived by Aristotle.

² Such was, for example, the case at Orléans: "A group of scholars, among them William of Conches, Adelard of Bath and John of Salisbury, gathered about Bernard of Chartres (born circa 1070) for the purpose of studying the classics both scientifically and æsthetically. It was an axiom of the Chartres (Carnutum) school that the modern writers stood on the shoulders of the ancients, like dwarfs on the shoulders of giants. In this school Plato was preferred to Aristotle; a deep interest was taken in mathematics, and it was Adelard of Bath who acquainted the West with Euclid's works. The Scholastics did not approve of such classicists, and the Battle of the Seven Arts, an allegorical poem, written in the thirteenth century by the trouvère Henry D'Andely, represents the struggle between Scholasticism and the movement that harked back to the glories of classical antiquity. The Orléanists and the Parisians are pitted against each other; the former fight under the banner of Grammar and are defended by the ancient authors, while the latter fight under the banner of logic and are defended by theology, physics, surgery, mantic art and the quadrivium; the Parisians gain the victory, but the poet prophesies that the day shall come when the classical writers will be reinstated in their place of honor."—Willmann-Kirsch, The Science of Education, V. 1, p. 219.

inspiration by the mediæval chroniclers and even the poets. Natural history had its place in the mediæval curriculum under the heading of astronomy and geometry, and the mediæval encyclopedias¹ contain a wealth of information on natural objects. Much of this information was written, it is true, in an unscientific spirit, but the same defect is hardly less glaring in many a seventeenth century encyclopedia. Better still, the spirit of the age was keenly alive to the language and beauties of nature as one can see in many mediæval fables and ballads.²

Two other features of mediæval school education need be noted. Though mediæval educational treatises consider what we to-day call the psychological aspect of teaching, in practice instruction was viewed from the standpoint of the subject taught: a process mainly of imparting and acquiring knowledge, entirely controlled by the text-books used in the schools. The teacher's task consisted in explaining and commenting upon the standard text-books which contained only extracts from the original sources. These were seldom used as a text, though the greatest reverence was shown them, as, in fact, to all learning and its representatives. "The pupil," says Hugo of St. Victor, "must believe his teachers in all that pertains to the sciences, but must follow especially them who are the pio-

Mediæval method of instruction.

¹ See Vol. I, pp. 174, 175.

² The following is a good illustration of this mediæval appreciation of the beauties of nature. It is taken from the work of Arnauld de Marveil, a thirteenth century troubadour:

[&]quot;Oh! how sweet the breeze of April,
Breathing soft as May draws near!
While, through nights of tranquil beauty,
Songs of gladness meet the ear:
Every bird his well-known language
Uttering in the morning's pride,
Revelling in joy and gladness
By his happy partner's side.

When, around me, all is smiling, When to life the young birds spring, Thoughts of love, I cannot hinder, Come, my heart inspiriting. Nature, habit, both incline me In such joy to bear my part; With such sounds of bliss around me, Could I wear 2 sadden'd heart?"

neers in a science, or who have treated it with the greatest knowledge or eloquence, i. e., Priscian in Grammar, Aristotle in Logic, and Hippocrates in Medicine."1

Aside from the schools and the materials they used, there were, in mediæval life, a number of educational agencies with a wealth of educational elements. Chivalric education pro-Other vided special training for the nobility; the peasant class re-educative ceived theirs through the activities involved in farming, and the city burghers through the study of the arts and crafts.² These three classes had their own literature which had grown with the national languages along the line of national traditions and temperament and was a great intellectual boon for people who did not enjoy the benefits of a higher education. This literature was composed of legends which had developed around biblical or national characters, of mystery and miracle plays, of fables and stories which had come to Europe from the East, tales of classical antiquity which had passed from the schools into the folklore of the nation, together with a wealth of epic, lyric and didactic poetry which drew its inspiration and materials from all these sources. For all classes the deep and allembracing religious life of the times was the great educational force. Religion determined the end and spirit of life and education. Art, science, wealth, power, intellectual or æsthetic attainment were not to be valued for their own sake, but as means to reach Christian perfection.

"All human activities must, to be deemed wise, aim to restore the primitive purity and perfection of our nature, or to alleviate some of the sufferings of our present life..... The right teaching will restore what we have lost, and hence the pursuit of wisdom is apt to be the sweetest solace of life; he who finds wisdom, shall be called happy; and he that possesses wisdom, is blest."

What the Renaissance Was. In many ways the Renais- The Renaissance was a radical departure from mediæval views of the sance and world, of life, of culture, but in none was it more striking

the classics.

¹ Eruditionis didascalicæ, VI, 3.

See Vol. I, pp. 75, 118, 155.
 Hugo of Saint Victor, Eruditionis didascalicæ, I, 2.

than in its attitude towards classical antiquity. The Middle Ages had considered the writings of the ancient Greeks and Romans as a storehouse of immense erudition to be used as a means for intellectual work and a starting point for all progress in knowledge. The Renaissance looked upon the classics as the splendid expression of the many-sided humanity of a bygone age, something finished, something to be studied, admired and imitated, but to which nothing should or could be added. Historically, the ancient world was dead, but on account of its broad humanity, its splendid achievements in literature, art, science, philosophy, politics, it should be brought to life anew and be the inspiration and model of modern times. This revival of classical antiquity had its origin in Italy, in the fourteenth century; it attained its highest development in the sixteenth and died out in the seventeenth after making its influence felt in every western nation.

The movement began in Italy. That the movement should have started in Italy is not to be wondered at. Scholasticism had never been deep-rooted in Italian soil and in no other country had the civilization of ancient Rome left so many remains. The knowledge of the Latin language had never died out in the peninsula; Roman institutions and traditions, Roman law and Roman monuments, manuscripts of Latin and Greek authors had been preserved there in a degree not to be met with in any other country.

"Italy could point to the most glorious remains of the greatness of ancient Rome, and throughout the Middle Ages the ancient traditions had here shown more vitality than elsewhere. The names of public offices were those of ancient Rome; Roman law was practiced in the courts, and Roman folklore was still the inspiration of the poet. While spinning, the Florentine mother related stories of the Trojans, of Fiesole and Rome. The Italians had regarded the great men of Roman history as their ancestors long before the humanists represented them as the teachers of the modern world. When the Italian poet struck the lyre, he seemed to make music in the familiar strain of ancient Rome, for the same spirit breathes from the old and the new song All that was brought to life of the ancient world was regarded as common property and was, in some measure, appreciated and assimilated by the entire nation. Even if the humanists — and the Italian humanists stand alone in this — formed a class apart and kept aloof from the masses, yet their interests were shared by all the people. . . . On one day both peasants and townspeople would

attend the (even if but half understood) oration of the learned orator, and on the next day they would lustily applaud the mythological figures in the pageant. The inhabitants of Arpino were proud of their townsman, Cicero, and when Pope Pius II discovered some Arpinites among his prisoners of war he set them free in honor of the great orator."

The vicinity of Italy to the Eastern Empire favored intercourse with that last citadel of ancient learning and during the fourteenth and fifteenth centuries Greek scholars came to the Italian shores in ever-increasing numbers, as visitors to the councils of Pisa, Constance, Basle, Ferrara-Florence, or as teachers of Greek in the great Italian cities, particularly after the fall of Constantinople in 1453. The Italian Renaissance was furthered still more by the political and industrial condition of the country. Italian trade and industry had increased immensely during the twelfth and the next two centuries chiefly as a consequence of the Crusades; wealth had poured into the country and with it had come leisure and a desire for more luxuries, more refined, more artistic surroundings. The trade relations of the Italians, especially with the Levant, their constant contact with other races, other beliefs and traditions had developed among them a spirit of criticism towards mediæval culture and institutions, while the democratic government of the cities and a chronic state of political strife had weakened respect for authority and developed a strong sense of individuality.

"In the Middle Ages human consciousness lay dreaming or half awake beneath a common veil. The veil was woven of faith, illusion, and childish prepossession, through which the world and history were seen clad in strange hues. Man was conscious of himself only as a member of a race, people, party, family or corporation — only through some general category. In Italy this veil first melted into air; man became a spiritual individual, and recognized himself as such. In the same way the Greek had once distinguished himself from the barbarian. At the close of the thirteenth century Italy began to swarm with individuality; the charm laid upon human personality was dissolved, and a thousand figures meet us, each in its own special shape and dress. . . . When this impulse to the highest individual development was combined with a powerful and varied nature, which had

¹ Willmann-Kirsch, The Science of Education, V. I, p. 275.

mastered all the elements of the culture of the age, then arose the all-sided man—*l'uomo universale*, who belonged to Italy alone. Men there were of encyclopedic knowledge in many countries during the Middle Ages, for this knowledge was not confined within narrow limits.... But in Italy, at the time of the Renaissance, we find artists who, in every branch, created new and perfect works, and who also made the greatest impression as men. Others, outside the arts they practiced, were masters of a vast circle of spiritual interest."

Revival of the Latin conception of a liberal education.

Though the leaders of the Renaissance were interested in all classical antiquity, it was the Roman conception of culture which became their ideal. Greek was added to the curriculum of the schools and in some places took precedence over Latin, but on the whole the Greek conception of a liberal education through music, gymnastics, science and philosophy never became that of the Renaissance; Quintilian's Institutes of Oratory² express it far better than Plato's Republic.³ Its finished product is the orator, the man of eloquence. The classics were to be studied not so much for the material they contained as for a mastery of the Latin style. Hence the attention which the study of the Latin language received, hence the drills in grammar, the exercises in composition and the cult of Cicero. The well-educated man was he that could use perfectly Ciceronian Latin in speech and writing. This Renaissance conception of a liberal education, centered as it was around the study of Latin, may seem a very narrow one, but such it was not, at least with the early leaders of the movement. Their view of eloquence, like Cicero's and Quintilian's, included not only all that makes for improvement of speech and development of the power to appreciate and enjoy the beautiful, but much that belongs to moral, even religious education. They believed that

¹ Burckhardt, J., The Civilization of the Renaissance in Italy, p. 145. Though exception must be taken with what the author calls "the charm laid upon human personality," the passage well expresses the strong tendency towards individualism, which marked the beginnings of the Renaissance.

² On this educational classic see Monroe, P., Source Book in the History of Education, p. 449 ff.

³ Ibid, p. 130 ff.



THE ACADEMY OF KNOWLEDGE (BY PORTA)

the study of the classics would result in a refinement not only of taste, but of the whole man as well.¹

The dream of a common classical culture.

New sciences

When the Renaissance began in the fourteenth century, the European nations were united by the bond of a common faith; to this tie the leaders of the movement dreamt of adding that of a common classical culture, to establish a sort of "Republic of Letters" which would include the cultured people of all nations, whether they belonged to the clergy or laity, whether high-born or lowly-born, men or women.² History does not know another example of such an extraordinary enthusiasm for a bygone age and feverish search for all the remains of its civilization. The libraries of churches, monasteries and castles were ransacked everywhere, in the hope of discovering some new text or a better copy of an old one. This hunt for the treasures of the past, begun in Italy by Petrarch³ and his friend Boccaccio,4 gradually extended to other countries and continued for generations with unabated enthusiasm. Manuscripts were collected, compared, criticised, annotated and the corrected texts were copied and edited. Out of this exegetical work arose a new science, classical philology.⁵ The study of monuments and inscriptions was taken up in the same spirit and through the same method, and thus the foundation was laid for another science, classical archæology6 which helped philology in the reconstruction of Greek and Roman life. University chairs and new schools were established for the teach-

¹ This worship of Latin was accompanied in the schools by a corresponding neglect of, even contempt for, the national language and literature which, strange though it may seem, were brought to their perfection during this period outside and independently of the schools, though it is true that the study of the classics contributed much to developing and training the linguistic and æsthetic sense of the western peoples.

² See Mary A. Cannon, Education of Women during the Renaissance.

⁸ See ch. III.

^{&#}x27;Ibid.

⁵ Niccolo de'Niccoli (1363-1436) and Laurentius Valla (1407-1457) were the leading pioneers of this new science in Italy.

⁶ Its foundation is connected with the names of Ciriaco of Ancona (1391-1450) and Flavio Blondo of Forli (1388-1463).

ing of the new learning, literary societies, called academies¹ after Plato's Academy in Athens, were organized for its pro- as also acadmotion, new libraries were founded2 and immense sums of emies, new money were spent in the acquisition and copying of manu-libraries. scripts.

"Never was there a time in the world's history when money was spent more freely upon the collection and preservation of manuscripts, or when a more complete machinery was put in motion for the sake of securing literary treasures. Prince vied with prince, and eminent burgher with burgher, in buying books. The commercial correspondents of the Medici and other great Florentine houses, whose banks and discount offices extended over Europe and the Levant, were instructed to purchase relics of antiquity without regard for cost, and to forward them to Florence. The most acceptable present that could be sent to a king was a copy of a Roman historian. The best credential which a young Greek, arriving from Byzantium, could use to gain the patronage of men like Palla degli Strozzi was a fragment of some ancient; the merchandise insuring the largest profit to a speculator who had special knowledge in such matters was old parchment covered with crabbed characters."

Important though the work of the Italian Latinist and Hellenist may have been, it would have had, for a long time, but little influence on the general public and the school if the

¹ The best known of these academies was the Platonic Academy founded in Florence in 1474, at the suggestion of the Greek Gemistus Pletho and made famous throughout Europe by Marsiglio Ficino, Pico della Mirandola and Angelo Poliziano. In Rome the humanists gathered around Nicholas V, Pius II and Leo X, and in 1458 Pomponius Laetus founded the "Accademia Antiquaria." The preceding generation had seen the "Court of the Muses" of Cosimo de Medici. Such societies continued to be organized in the sixteenth and following centuries not only in Italy, but in other countries. Established at first for the study of the classics, they took up later on the study of the vernacular and the sciences. Of this new type of academy the best illustrations in the sixteenth and seventeenth centuries were the "Accademia dei Lincei" and the "Arcadia," founded in Rome in 1603 and 1690, respectively, the "French Academy" founded in 1635, the "Academia secretorum naturæ" founded at Naples in 1560 and the "Royal Society of London" founded in 1645 and patterned on the preceding.

² To this period belong the foundation of the Medicean library at Florence (1444), the great ducal library at Urbino (c. 1475) and the greatest of them all, the Vatican library, founded by Nicholas V in 1450.

⁸ Symonds, J. A., The Renaissance in Italy, Vol. II, p. 139.



ABRAHAM VON WERDT'S PRINTING PRESS

knowledge of the recovered classical treasures had had to be disseminated through the old copying process. Fortunately, through the use of paper, which became common at that time in the West, and the invention of printing, both of which immensely lowered the cost and increased the rapidity of the

¹ The manufacture of paper, it seems, is a Chinese invention, which found its way into Spain under the Mohammedan occupation, but did not cross the Pyrenees. It was only in the fifteenth century that the use of paper became common in Europe, after the process of manufacturing it had been obtained anew from the East by the Greeks, and from them brought to Italy. By the close of the four-teenth century paper mills had been established at Padua, Florence, Bologna, Milan and Venice in Italy and at Mainz and Nuremberg in Germany.

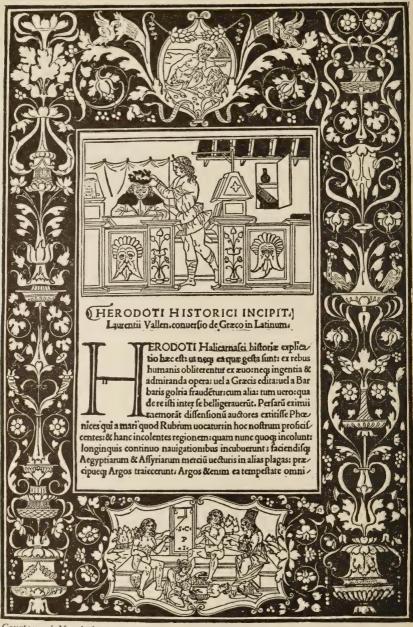
² Printing from entire plates was a regular trade before the middle of the fifteenth century, and the Chinese seem to have known the use of movable types for centuries before that time, though they did not derive much advantage from it, on account of the many characters used in the Chinese language. The process of printing from movable types in the West was invented and perfected by John Gutenberg of Mainz about 1450. This new art was generally well received in all centers of culture, and from the start most liberally patronized by the clergy and monasteries. The first printing press in Italy was set up in the ancient abbey of Subiaco

process of bookmaking, the new learning spread to every country in a comparatively short time.

One of the unfortunate results of the Renaissance infatua- Unfortunate tion for classical antiquity was to make men blind to the consequences. achievements of the Middle Ages and the merits of their culture and schools. Scholasticism and the sublime mediæval architecture were pronounced to be the product of a barbaric age, and this verdict of a pedantic superficiality remained unchallenged for three centuries. It took another Renaissance at the beginning of the nineteenth century¹ to bring out once more all the originality, depth and beauty of mediæval civilization. Another and far more serious consequence of the new learning was to introduce into western life and education elements that were entirely foreign, even antagonistic, to Christianity. Though the attention of the Renaissance was avowedly taken up with the form of classical art and literature, the student could not escape the pagan spirit of the models set before him, and, in fact, that spirit was not long in appearing in the life and writings of the period. Desire for fame, ill-disguised jealousy at the success of a rival, which were so foreign to mediæval artists and writers, are a commonplace among those of the Renaissance and they soon found their way into the

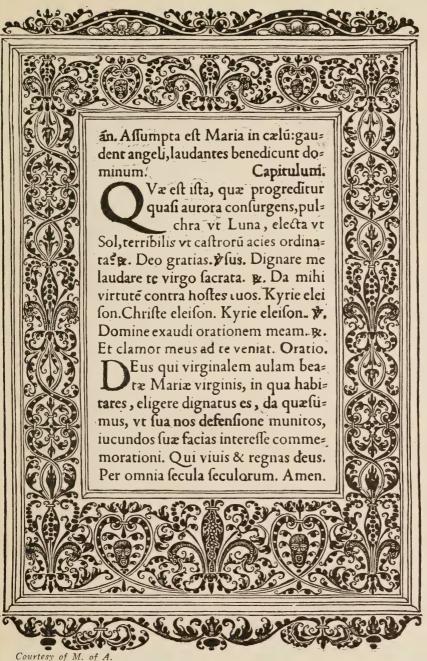
in 1465 and two years later moved to Rome. By the end of the fifteenth century every large city in Europe had its printing establishments, Venice taking the lead with the famous Aldine press of Aldus Manutius. At first the type used everywhere was the so-called Gothic or "black-letter" type, much in the style of the mediæval script, and still used in a modified form in German countries; later on the Italians devised a new type, very much like that used by the ancient Romans, which was gradually adopted in non-German lands, and they also devised the small, compressed type known as Italic. It has been computed that before the year 1500 books in nearly 8,000 editions of 300 to 1,000 copies for each edition had been published. Naturally, the books printed were those most in demand: the Latin Bible and its translations in the vernaculars, the writings of the Fathers, prayer-books, catechisms, the Latin and Greek classics, grammars and other text-books.

¹ I. e., Romanticism and the Revival of historical studies. See Bourne, H. E., The Teaching of History, ch. I, especially bibliography; also Lanson, G., Histoire de la Littérature Française, pp. 930 and ff.



Courtesy of M. of A.

FAC-SIMILE OF PAGE FROM HERODOTUS' HISTORY VENICE, 1494



Courtesy of M. of A.

schools. Teachers became but too ready to follow the advice of Quintilian, to play upon their pupils' ambition and love of praise. "To be satisfied with mediocrity is, by the immortal gods, a sign of a low, cowardly, and even depraved soul; but how noble is the soul of him who conquers the foe, who takes the citadel whence his glory shall be visible to all the earth to the end of time, and whose fame shall be celebrated by so many thousands of men as are grains of sand on the shore of the sea.



SAVONAROLA PREACHING

Hence we call upon all whom the Muses have endowed with their gifts to bestir themselves and to strive for what has fired the souls of the bravest of men."¹

Love of form produced consummate skill and artistic finish in style, but this was too often at the expense of solidity and depth. The neo-Latin literature of the period is, on the whole, shallow, pedantic, dealing with trifles. Indifference, contempt for Christianity, if not actual antogonism to it, was in many of

¹ Fortius, J., De ratione studii liber, in "H. Grotii et aliorum dissertationes de studiis instituendis" (Amstel, 1645), p. 252.

the "Poets" the counterpart of their love of Greece and Rome, which some of them carried to extravagant, even ridiculous lengths. 1 Worse still was the philosophy of life expressed in light or serious or licentious vein by many Renaissance men of letters and the unbridled license in public and private life which called forth the scathing condemnation of a Savonarola.2

Many humanists, as the devotees of the new learning came to be known, like Guarino, Aeneas Sylvius, and Vittorino da Feltre in Italy, Agricola and Hegius in Germany, strove, in the early stage of the movement, to reconcile the study of the classics with the principles and traditions of a sound Christian education, but the process of fusing old and new elements was retarded by the attacks upon the Church of the younger humanists and the religious conflict at the beginning of the sixteenth century; only when the first stage of the Protestant Reformation was passed and men began to consider the organization of a new order, did the classical studies again receive seri- Reconciling ous attention. Aside from isolated protests against the introduction of the pagan writers into the schools, the view which tradition. came to prevail among Catholics and Protestant educators alike was, that the study of the classics was indispensable for a general intellectual training preparatory to the higher studies. Like the humanists, the Protestants were opposed to the Middle Ages and their culture, though on different grounds, and the study of the classical languages, as a preparation for the study of biblical and patristic literature, was in keeping with the main Protestant religious tenet, viz., that the Bible is the only authority in matters of religion. The Catholics, on the other hand, looked upon the new learning, not only as a useful addition to the mediæval content of education, but as an improvement on its technique, and their efforts tended to devise a new system in which old and new would be harmonized.

¹ Thus Marsiglio Ficino kept a lamp burning day and night before the bust of Plato, and Pomponius Laetus adored the genius of ancient Rome.

² Fra Girolamo Savonarola (1452-1498), a great Dominican preacher and prior of San Marco in Florence. See Cath. Encyc.

Scholastic philosophy and theology, with as much as possible of the old arts course, were retained; pagan literature, shorn of its objectionable elements, was introduced into the curriculum; the study of the classics, aside from its linguistic and æsthetic value, was considered a preparation for the study of patristic literature, and classical institutions and culture were looked upon as a useful adjunct to Christian antiquities.

Other aspects of the Renaissance.

The revival of the study of the Greek and Latin classics was but one phase of the Renaissance, for it must be borne in mind that the movement encompassed the whole thought life of the West; there was, in addition to literature, a Renaissance in art, politics, philosophy and science. The treatment of these other aspects of the movement does not, of course, fall within the scope of a book of this kind, but a few words on each may not be out of place, if only to give an idea of that age as a whole.

In art, particularly in painting, the Renaissance worked a revolution, not only in its style and technique, but in the very conception of its function. Mediæval art had been the servant of religion, an expression of the Faith of the age and a means of instruction for the masses, the book of the unlettered. The Renaissance made art independent; it proclaimed and applied the doctrine of "art for art's sake," which, in the case of too many artists, became a poor excuse for lewd productions. The Renaissance did not entirely forsake Christian subjects, but in the main it was pagan antiquity which supplied its models and from which it derived its inspiration. Many so-called schools grew out of this new artistic movement in and outside of Italy: Roman, Umbrian, Venetian, Lombard, Bolognese and Tuscan; Spanish, French, German, Flemish and Dutch.¹ In law and politics the pagan trend of Renaissance thought and its worship of Roman institutions and culture, combined with the growing idea of the political individuality of nations, accelerated the tendency towards absolutism in government, and was

¹ See Guggenberger, A., General History of the Christian Era, Vol. II, pp. 136-138, and bibliography on p. 140.

in the main responsible for a new doctrine of statesmanship which found its best known exponent in Machiavelli. In philosophy the constructive achievements of the Renaissance were practically nil; the period was one of philosophical anarchy. Scholasticism was now in decadence. In its place the Greek scholars who flocked to Italy in the fifteenth century revived the study of the ancient systems of Greek speculation. Georg-



ius Gemistus Pletho founded in Florence a new Platonic Academy in the government of which he was succeeded by Bessarion, later cardinal, while their countrymen, Gennadius, Theodorus Gaza and Georgius of Trebizond, taught the philosophy of Aristotle. Others were involved in a heated controversy

Niccolo Machiavelli (1469-1527), a Florentine historian and statesman, whose fame rests chiefly on "The Prince," a political tract in which are set forth the doctrines referred to above. "Where it is a question of saving one's country," writes Machiavelli, "there must be no hesitation on the score of justice or injustice, cruelty or kindness, praise or blame, but, setting all things else aside, one must snatch whatever means present themselves for the preservation of life and liberty."

around the interpretation of Aristotle's doctrine concerning the immortality of the soul; others still tried to revive stoicism, epicurianism, pyrrhonism or indulged in the most fantastic speculations. Count Pico della Mirandola and his nephew Francesco advocated the study of Hebrew in addition to Latin and Greek because they believed that the Jewish Cabala¹ was no less an important source of wisdom than Plato. The mixture of old theories, of old superstitions and new ideas born of scientific discoveries, gave rise to theosophy, a strange combination of theology, natural science and magic, which studied nature to discover and use the traces of Divine Power which it conceals. The leading exponents of these doctrines were the Milanese, Girolamo Cardano, a noted physician and mathematician, and the Swiss physician, Theophrastus of Hohenheim, commonly called Paracelsus.²

Far more important than this revival of pagan or Jewish philosophical speculation were the scientific surprises experienced by the age. Columbus discovers America and Vasco da Gama the new sea route to India; Magellan succeeds in making the tour of the earth; Nicholas of Cusa teaches that the earth turns around its axis; Copernicus relegates the earth among the planets; Galileo teaches that the earth has a double motion, and Kepler discovers the planets' orbits and the laws of their motion. The Italians, Leonardo da Vinci, della Porta and Galileo, experiment in physics and mechanics; the Frenchman, Viète, formulates the science of algebra into modern form; the Englishman, Napier, invents the logarithms, and the Belgian, Vesalius, lays the foundation of the science of human anatomy; the Spaniard, Michael Servetus, and the Italians,

¹ See Turner, W., History of Philosophy, p. 315.

² On this whole phase of modern philosophy, see Turner, W., History of Philosophy, pp. 422-428.

^a The possible advent of these new conceptions of the universe had been admitted by St. Thomas nearly 200 years before the appearance of Copernicus' "De Orbium Celestium Revolutionibus." See Turner, op. cit. p. 433.

Realdo Colombo and Andrea Cesalpino, anticipate Harvey's discovery concerning the circulation of the blood. These discoveries were to exert a far deeper influence on western thought and western education than the revival of classical art and literature.¹

QUESTIONS FOR DISCUSSION

- Compare the twelfth and fifteenth century Revivals as to origins, scope and aims.
- 2. Show that the fifteenth century Revival would have been impossible in the eleventh.
- 3. Show the relation between the Italian national aspirations and the Renaissance.
- 4. Compare the twelfth and fifteenth century methods of treating historical subjects.
- 5. Compare as to relative importance the various causes of the Renaissance.
- 6. Compare as to origins, scope and aims the fifteenth century Renaissance and the Romantic movement of the nineteenth century.
- 7. Account for the fact that the Renaissance was at first chiefly a literary, artistic, archæological movement.
- 8. Discuss Machiavelli's conception of the head of the State.
- 9. What were the distinct contributions of the universities to the Renaissance?
- 10. To what extent did the Renaissance affect the life of the masses?

SOURCES

See list appended to Chapter III.

REFERENCES

Burckhardt, J., The Renaissance in Italy. Cajori, F., A History of Mathematics. A History of Physics.

Janssen, J., History of the German People.

Lacroix, P., The Arts in the Middle Ages and at the Period of the Renaissance.

Lodge, O., Pioneers of Science.

Owen, J., Skeptics of the Italian Renaissance.

¹On this early scientific movement, see histories of science listed in bibliography appended to this chapter and chapter VIII.

Pastor-Antrobus, History of the Popes, Introductions to Vol. I and V. Routledge, R., A Popular History of Science.
Sandys, J. E., History of Classical Scholarship.
Symonds, J. A., The Renaissance in Italy.
Walsh, J. J., The Century of Columbus.
Whewell, W., History of the Inductive Sciences.



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CHAPTER III

HUMANISM AND HUMANISTIC EDUCATION

HAT Humanism Was. Three main tendencies are noticeable in the manifold interests and activities of the Renaissance: a philosophico-scientific tendency, which was to reach its full development in the philosophy of Descartes and the scientific discoveries which preceded and fol-

lowed it; a social-religious tendency, which came to a climax in the politico-religious upheaval of the sixteenth century; a literary, archæological, artistic tendency, which, at least in the south of Europe, reached the high mark of its development in the fifteenth century. This last tendency, the one with which we are concerned here, is commonly referred to as humanism. Etymologically the term means, in a general way, that which pertains to man; historically it stands for two widely divergent views of human nature, human life and its purpose, which had their origin in the Revival of Learning.

According to the early humanists, the mediæval conception of human nature had been obscured and distorted by the ascetic tendency of the age; in man, the Middle Ages had known and appreciated only the intellectual side; his feelings, his longings, earthly aspirations, had been ignored or despised. Man, in the fullness of his nature and achievements, it was held, was to be sought for, and studied, and imitated in the splendid civilization of ancient Greece and Rome, for which all humanists at first professed an unbounded admiration. It was only gradually that men became aware of the antagonism existing between the pagan and Christian conceptions of human nature and human life. When this antagonism had become evident, humanism branched off into two movements which are to-day as far apart as they were in the fifteenth century: a Christian

Pagan humanism vs. humanism and a pagan humanism. The latter, breaking away from Christianity, not only adopted the classical canons of beauty in art and literature, but, with them, the very spirit of the Græco-Latin civilization. Human nature, it teaches, is essentially good; therefore it should be allowed to grow and develop free from the fetters with which Christianity tries to bind it; antiquity, not the Middle Ages, offers to man the ideals he should strive after; reason alone is the criterion of truth, and the guiding principles of conduct are not to be sought in the Gospel, but in that great storehouse of human wisdom, which is ancient philosophy. Braccolini Poggio (1380-1459) and Francesco Filelfo (1398-1481), in Italy; François Rabelais (c. 1495-1553), in France; Ulrich von Hutten (1488-1523), in Germany, are typical representatives of this radical humanism in its early stage. Like its pagan counterpart, Christian humanism has a genuine admiration for classical antiquity, for the greatness of its historical characters, the everyouthful beauty of its artistic and literary masterpieces and the lofty teachings of some of its philosophers. It welcomes the study and imitation of the ancient works of art, the revival of classical Greek and Latin, the principle of scientific inquiry, the study of the biblical and patristic sources of theology. But the brilliancy of pagan civilization does not dazzle the Christian humanist to the point of making him blind to its shortcomings. It does not make him forget that a loftier and truer conception of life and its purpose has long since superseded the conception of Hellas and Rome. 1 Christian humanism is seen at its best in men like Vittorino da Feltre (1378-1446), Juan Luis Vives (1492-1540) and many others, to whom we shall have occasion to revert later on.

Christian humanism.

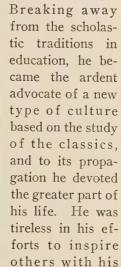
Humanism in Italy. Traces of humanism appear in the Divine Comedy of Dante (1265-1321) and more particularly in his unfinished Banquet (Il Convito); his use, side by side, of classical and Christian materials, his conception of learning as a means of personal culture, his interest in the subjective, his

The pioneers.

¹ See Etudes, June, 1925, No. 11.



craving for poetical renown, are all typical traits of humanism. On the whole, however, Dante is still essentially mediæval: Aristotle and St. Thomas are still his masters. The first great humanist was Petrarch (Francesco Petrarca, 1304-1374), sometimes referred to as "the first modern scholar and man of letters," and the very personification of the Renaissance spirit in his desire for worldly fame, his joy in the beauty of nature, his reverence for the ancient writers, particularly Cicero and Virgil.



own enthusiasm, and collect old Latin manuscripts which he would then publish with corrections and annotations. Though

a Christian at heart, he emphasized the present life against the life to come, its beauties and opportunities for self-development, worldly achievements and worldly fame. Besides his lyric productions in Italian (*Trionfi* and *Canzoniere*), he wrote many Latin works, among which his *De Viris Illustribus* and *Epistolæ* had the greatest effect upon his time. Petrarch's labors for the revival of the classics were limited to Latin; he had, at one time, begun the study of Greek which it was his ardent desire to master, but the work had to be discontinued and he could never resume it thereafter.

Giovanni Boccaccio (1313-1375), one of the younger humanists grouped around Petrarch and the first modern scholar in the West to master the Greek language, was, next to Petrarch, the most influential of the early Renaissance leaders. Like his friend and master, he was a tireless searcher for old manuscripts, a corrector and annotater of texts, and he did his utmost to foster the study of the classics in the schools. Of Boccaccio's many works, the most important ones are his *De Genealogiis Deorum Gentilium*, a dictionary of classical mythology which for a long time was an authority on the subject, and his *Decameron*, which breathes a decidedly pagan spirit and owes not a little of its notoriety to the indecencies it contains.

A better Latin scholar than either Petrarch or Boccaccio was Gasparino Barzizza (1370-1431), a professor of rhetoric and Latin letters at the University of Padua. He made it his specialty to collect, annotate and edit the works of Cicero, and used them with remarkable success in his classes.

For some time very little was done by the early humanists for the revival of Greek. Very few of them possessed any knowledge of the language and certainly none could teach it with any degree of scholarship. The revival of Greek started in earnest with the work of Emmanuel Chrysoloras (1350-1415), a distinguished Byzantine scholar who had come to Italy on a diplomatic mission and while there accepted the professorship of Greek which had been recently established at the University of Florence. Chrysoloras also taught Greek

The revival of hellenism.



BOCCACCIO
(By Cornelis van Dalen)

for some time at other universities, notably at Pavia; he started schools for the new learning in a number of cities and translated Greek authors. His Erotemata (Questions) remained for a long time one of the standard texts for the study of Greek grammar in Italy.¹ Among the pupils of Chrysoloras were several of the leading Italian humanists: Niccolo de'Niccoli (1364-1437), the literary adviser of Cosimo de Medici and the real founder of the Medicean library; Leonardo Bruni (1369-1444), also known as D'Arezzo, Aretino, the author of a humanistic educational treatise, De Studiis et Literis (On Studies and Letters); Braccolini Poggio (1380-1459) and Francesco Filelfo (1398-1481), who numbered among his pupils men who afterwards became Popes, Nicholas V and Pius II; Guarino Da Verona (1374-1460), who was for several vears headmaster of the court school at Ferrara; his son, Battista Guarino (1434-1513), who wrote a remarkable treatise on humanistic education, De Ordine Docendi et Studendi (On the Method of Teaching and Studying); Pietro Paolo Vergerio or Vergerius whose work De Ingenuis Moribus et Studiis Liberalibus (On Noble Character and Liberal Studies) is perhaps the best exposition of humanistic education by a leader of the movement.² These and other pupils of Chrysoloras continued the work begun by the master and the cause of hellenism in the West was still furthered by new arrivals of Greek scholars in Italy.

Results in Italy.

By the middle of the fifteenth century humanism was wellestablished in Italy. It had gained a firm footing in the uni-

¹ Two other Greek scholars of note who came to Italy during the early Renaissance were Theodorus Gaza (c. 1400-1475) and Demetrius Chalcondyles (1424-1511); the former was the first professor of Greek at the University of Ferrara, and prepared a very popular Greek grammar; the latter lectured at Perugia, Padua, Milan and Florence. Other learned Greeks came to Italy before the fall of Constantinople (1453) and many more after.

² For a full account of this and other humanistic educational treatises see Woodward, W. H., "Vittorino da Feltre and Other Humanist Educators."



Cosimo de Medici

versities¹ and the old schools, and it had led to the foundation of libraries, literary societies and new schools for the promotion or study of the new learning. Classical Latin, no less than Italian, was the language of the upper classes and in many places it was one of the prerequisites for civil service. Princes and wealthy burghers vied with one another in their patronage of humanists; in fact the tyrants who were now in control in many of the former Italian republics saw in the prevailing classical enthusiasm a means of maintaining their own power. They knew that by making their city a great artistic and literary center they would arouse the pride of its population and thus gain in their eyes some kind of legitimacy for their own titles to power. "With his thirst for fame and his passion for monumental works, it was talent, not birth, which he [the tyrant] needed. In the company of the poet and scholar he felt himself in a new position, almost, indeed, in position of a new legitimacy."2 Gian Galeazzo Visconti of Milan, Cosimo de Medici and still more his grandson, Lorenzo II Magnifico (The Magnificent) in Florence are the most typical, but not the only examples of these humanistic princes. There was, in the whole peninsula, a keen rivalry among the reigning families as to which would possess the best library, the rarest manuscripts, the most famous artists or men of letters, the best academy, or university, or court school.

Reference has already been made to one of these court schools, that of Ferrara, of which Guarino the Elder was in charge for several years. The most famous of the Italian court schools, however, was that conducted at Mantua for twenty-two years by Vittorino da Feltre,³ an able scholar and

¹ Some of them, however, like Bologna and Pisa, were strongly conservative, and were for a long time very little affected by the new learning.

² Burckhardt, The Civilization of the Renaissance in Italy, p. 9. This work is one of the best accounts of the Italian Renaissance, its causes, its results and the conditions under which it took place.

² Vittore dai Rambaldoni (1378-1446), commonly known as da Feltre from the place of his birth.



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exemplary Catholic layman, who was, besides, a practical and indefatigable teacher, and who, more than any other humanist, contributed to the organization of the new studies into a system.

An early humanistic schoolmaster.

Vittorino had received the best of preparations for the position he was to occupy at Mantua. For many years he had been connected with the University of Padua both as a student and master, and he had breathed there the humanistic spirit. One of his teachers had been Barzizza, the best Latinist of the age. After receiving his doctorate he had devoted himself to the study of mathematics under the best of private teachers and when already long past thirty he had gone to Venice to study Greek under Guarino, who was then considered the leading Greek scholar in Italy. One of the conditions laid down by Vittorino before accepting the Marquis' invitation was that he would be free to receive into the school other children besides those of the reigning family. The school was located in a beautiful villa, surrounded by extensive meadows, which had been the recreation hall of the Gonzagas. Vittorino called his school the "Casa Giocosa," the "Pleasant House," not only because of its pleasant surroundings, but also of the spirit which it was his intention should prevail there. The pupils boarded at the school or near enough to be under his direct supervision; they were, besides the Gonzaga Princes, scions of the leading families of Mantua, sons of Vittorino's friends and promising boys of poor parents of whom there were sometimes as many as seventy. To all of them Vittorino acted as a father, looking out for their clothing and food, sharing in their games and pleasures, never relaxing in his close supervision of their conduct. Himself a practical and devout Catholic, he believed that religion was an essential element in any plan of education. The atmosphere of the "Pleasant House" was a thoroughly Christian one. By precept and still more through example, Vittorino endeavored to develop in his pupils the practice of

¹ A play on the original name of the house, "La Casa Zoyosa" (The House of Pleasure).

all the duties which religion commands and the virtues it inspires. Every day there were religious observances at which all were to be present, and the students were expected to approach the Sacraments frequently.

In the plan of studies much was retained of the mediæval arts course, though the classification, relative importance and methods of teaching these subjects were somewhat changed. Of the old quadrivium, the mathematical subjects seem to have received the most attention and they were taught in connection with all kinds of practical applications; there was also given instruction in music and philosophy, but Latin and Greek were the central subjects and they were taught through a novel

method and with a novel purpose. In the mediæval schools Latin had been studied for its practical value in life and to some extent its disciplinary value, as a preparation for the study of philosophy, law, medicine and theology. In the "Pleasant House," as in every humanistic school of the period, Latin and Greek



were chiefly studied for their intrinsic value, both as to form and content. The study of grammar was limited to the minimum requirements for the correct use of the language and the understanding of the Latin or Greek text. Great importance was attached to Latin conversation, and its practice began very early; much attention was given to clearness and correctness in articulation, accent and rhythm, and the vocabulary of the pupil was constantly increased through the memorizing of selections from the classic authors. Due to the fact that there was still a great scarcity of text-books—the invention of printing took place after Vittorino's death—a goodly amount of dictation had to be made by the teacher.

The process was a slow one of course, but it was not without its own merits; it enabled the teacher to expurgate at will the pagan authors that he used; it afforded constant practice in Latin and Greek spelling and compelled a far better attention to detail than the use of a text-book would have made possible. In the study of the text the mediæval custom of straining the literal meaning in a search for a metaphorical, allegorical and mystical sense was abandoned. The teacher now limited himself to ascertaining the real meaning of the passage under consideration from a study of the text and historical background; then the chief characteristics of the author were pointed out, as also those features of vocabulary, construction and diction which deserved to be imitated. In this way a wide range of Latin and Greek writers, including the Church Fathers, were read. The immediate purpose of the study of the classics was the acquisition of a good style, both in speech and writing, and in direct preparation for this there was constant practice in composition. Virgil and Livy in Latin, Homer, Demosthenes and Æschylus in Greek, St. Chrysostom and St. Augustine among the Church Fathers, seem to have been Vittorino's favorite writers.

Physical training received careful attention not only on account of its influence on the mental life of the pupil and its importance in the preparation for the military career to which some of the boys were destined, but also because of Vittorino's conviction that such a training is an integral part of a complete and harmonious education. Apart from the field games, in which all were to participate, there were special exercises assigned to each according to his abilities. In most of these exercises Vittorino himself was an expert and here, as elsewhere, he taught by example. His aim was to develop in the boys strength, agility, hardiness, power of endurance rather than athletic skill.

Most worthy of note were the aim and general method of Vittorino's work. All school activities, whether physical training, studies or religious exercises, had but one ultimate purpose:

to educate young men "who should serve God and State in whatever position they would be called upon to occupy."1 Vittorino was intensely devoted to his work and the welfare of his pupils; he studied their character, interests, abilities, and the career they intended to enter and he shaped each student's course of study accordingly. The importance of the work of this great master lies in his having translated into school practice the new conception of education that was current among the humanists of the age and in his having reconciled this conception with the traditions and spirit of Christian education. Better than any schoolmaster of his time, he grasped the full meaning of the aim of education, of its content and methods; so much so, indeed, that in his practices he often anticipated present-day educational opinion, as for example, in his insistence on the importance of the personality of the child. He exerted a deep influence on the Italian schools of his own and following generation. In the "Pleasant House" were trained a number of men² who became prominent as statesmen, ecclesiastics, scholars and teachers,3 and this fact alone would be the best commentary on the work of the "first modern teacher."

The broad and liberal conception of a humanistic education An early which has just been outlined was not peculiar to Vittorino da educational Feltre. We find it carried into practice in all the schools that treatise. were founded or reorganized along humanistic lines in the first half of the fifteenth century. We find it expounded in a number of educational treatises that were published during the period, chief among them, Pietro Paolo Vergerio's De Ingenuis Moribus, which was written in 1392 and was addressed to Ubertino, son of Francesco Carrara, lord of Padua. "We

¹ It should be noted that the education received at the "Pleasant House," and similar institutions, was of a general character. Those wishing to receive a professional training in law or medicine, or

theology found it necessary to go to a university.

Many girls received, during this period, the same humanistic education as boys. Cecilia Gonzaga, one of the most cultured women of

the fifteenth century, was educated at the "Pleasant House." On this point see Rosmini, "Idea dell' ottimo precettore nella vita e disciplina di Vittorino da Feltre."

call those studies liberal," says Vergerio, "which are worthy of a free man; those studies by which we attain and practice virtue and wisdom; that education is liberal which calls forth, trains and develops these highest gifts of body and mind which ennoble men and which are rightly judged to rank next in dignity to virtue only." In his analysis of a liberal education Vergerio first considers virtue, the corner-stone of humanistic training, and then he enumerates and appraises the various humanistic subjects. In the first rank he places history, moral philosophy and eloquence because all three contribute the essential elements of a liberal education: integrity of character, soundness in judgment and wisdom of speech. In order to take up with profit the study of these three branches the student needs a thorough linguistic training, i. e., training in grammar, rhetoric, logic and composition; "nor should we," says Vergerio, "neglect the subjects of the old quadrivium, because they supply much valuable information." He has much to say that is of interest and value even to-day on the selection of texts, the method to be used in the teaching of every subject, interest and capacities of children and incentives to study. To quote again from this remarkable treatise: "It must not be supposed that a liberal education requires acquaintance with them all [school disciplines], for a thorough mastery of even one of them might fairly be the achievement of a life-time. Most of us, too, must learn to be content with modest capacity as with modest fortune. Perhaps we do wisely to pursue that study which we find most suitable to our intelligence and our tastes, though it is true that we cannot rightly understand one subject unless we can perceive its relation to the rest. The choice of study will depend to some extent upon the character of individual minds. For whilst one boy seizes rapidly the point of which he is in search and states it ably, another, working far more slowly, has yet sounder judgment and so detects the weak spot in his rival's conclusions. The former, perhaps, will succeed in poetry, or in the abstract sciences; the latter in real studies and practical pursuits."

Like the work of Vittorino da Feltre. Vergerio's treatise shows us Italian humanism at its best: an all-round culture preparing for an intelligent and active participation in the life of the times, both public and private. Gradually, however, a The narrowing narrowing of this humanism took place both in aim and content. The study of the classics, which in the early phase of conception the movement had been looked upon as one of the means of culture, became the one absorbing activity of the secondary school, and the acquisition of an elegant Latin style the chief purpose of its work. In many instances the course even narrowed down to a study of Cicero and a slavish imitation of his vocabulary, phrases, construction, letters, exordiums and perorations. It is this decadent type of humanistic education which is sometimes referred to as "Ciceronianism" and which Erasmus has ridiculed in his Dialogus Ciceronianus.

humanistic of education.

Humanism in France and the Spanish Peninsula. From Italy the Renaissance gradually spread to other lands and, as was but natural, the first one of these to feel its influence was France.² In no other western country, with the exception of Italy, were the connections between past and present so many or so strong. France had been a Roman province for five centuries and so well had she assimilated Latin culture that at one time the fame of her schools surpassed that of the Italian. She still possessed and took pride in many remains of Roman roads and aqueducts, Roman baths, Roman theatres and circuses; her affiliation with the Roman Church was nearly as old as that of Italy; her language, a direct offshoot of Latin, was another bond uniting her with ancient Rome. Yet, in spite of all her connections with classical antiquity, France had been a prime mover in mediæval intellectual life. It was

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¹ The decay is already visible in the pretentious style of Laurentius Valla (Lorenzo della Valle, 1407-1457), and it reaches its height in Pietro Bembo (1470-1547), the secretary of Leo X, at whom Erasmus was probably aiming in his "Ciceronianus."

² See Lanson, G., Histoire de la Littérature Française, Troisième Partie, ch. I-III, especially references given on pp. 223, 232, 236, 240,

in France that Gothic art had originated, in French schools that scholasticism had grown and reached its fullest development. This vitality of the mediæval spirit in France explains on the one hand why the Renaissance did not begin in that country and on the other why it never took such a hold on the nation as it did on Italy.

The beginnings.

Traces of a revival of classical studies in France can be discerned in the fourteenth century. In 1361 Petrarch came to Paris on a diplomatic mission and while there made the acquaintance of French scholars, among them Pierre Bersuire who had translated Livy into French for King John II. Petrarch met other French scholars at Avignon, the city of the Popes, through which came much of the early Italian influence on France. At the close of the fourteenth and the beginning of the fifteenth centuries, there had already been formed a remarkable group of enthusiastic French students of Latin antiquity: Nicolas Oresme, Jean Gerson, Pierre D'Ailly, Nicolas de Clamanges, Laurent de Premier Fait, Christine Pisan and many others. Nicolas Oresme (+1382), chaplain and counsellor of Charles V. translated into French from the Latin version part of the works of Aristotle and, a no less remarkable innovation, wrote in the vernacular on scientific subjects; Laurent de Premier Fait (+1418) translated part of the works of Cicero and Boccaccio, and Nicolas de Clamanges (+1440), theologian and humanist, taught the rhetoric of Cicero and Aristotle in the schools of Paris. Pierre D'Ailly (1350-1420), bishop, cardinal, and one of the leading theologians of his time, was also interested in the sciences. His Imago Mundi, in which, on the authority of Aristotle, Pliny and Seneca, he showed the possibility of reaching the Indies through the west, foreshadowed the discovery of Columbus. Jean Gerson (1364-1429), at one time chancellor of Notre Dame and the University of Paris, and one of the most eminent orators of his time, was thoroughly familiar with the ancient Latin authors, evidence of which is seen in his sermons, both Latin and French. The humanistic tendency is still more striking in Jean de Montreuil (1354-1418), at one time secretary to Charles VI, who still used mediæval Latin, but drew his inspiration from pagan writers, whom he is fond of quoting even on ecclesiastical affairs. By 1455 a teacher of Hebrew, and by 1457 one of Greek were members of the faculty of Paris and the study of Latin letters continued to gain in importance all through the century.

It was only in the sixteenth century, however, that the French humanistic movement began in earnest, after it had been stimulated by the military expeditions of Charles VIII, Louis XII and Francis I, which, five or six times in the course of thirty years, from 1494 to 1525, brought the French nation into contact with the brilliant Italian civilization. The humanists found a powerful ally in Francis I who had brought back from his military expeditions a keen desire to rival in France the artistic and literary splendor of the petty Italian courts. His court, like that of his sister, Margaret, Oueen of Navarre, became a rallying point, not only for artists and poets, but for philosophers and humanistic scholars. Among these the most distinguished undoubtedly was Guillaume Budé, or Budaeus (1468-1540), a fellow-student of Erasmus at Paris. He was twenty-four years of age and had completed his course Typical in law when he took up anew the study of Latin writers, especially the poets. "I taught myself and late in life," he tells us of his study of Greek, which he had first taken up under the Spartan Hermonymus, but continued alone after a few lessons, because the master could not teach the language to his satisfaction. In 1502 he published a translation into Latin of a treatise by Plutarch and in 1508 an edition of the Pandects with a number of new annotations. His treatise on Roman coinage and ancient measures, which he published in 1514 after nine vears of preparation, and his commentaries on the Greek language, established abroad his reputation as a scholar and contributed much to turning French humanism towards classical philology. Budé had been secretary to Louis XII; Francis I made him Royal Librarian and it was at his request that in 1530 the king founded several professorships of classical phil-

ology, the beginning of the Collège de France. Budé's views on education are best set forth in his De l'Institution du Prince (On the Instruction of the Prince), which he dedicated to

Francis I. "Every man," he writes, "even if a king, should be devoted to philology," by which he meant that the prince, like every man, should receive a good humanistic education, should be well versed in Latin and Greek and have a wide knowledge of history, not only for his own benefit, but for the enlightened protection that he should bestow upon letters.

Mathurin Cordier (1479-1564), more commonly called Mathurinus Corderius, was another enthusiastic French



Guillaume Bude

humanist. After teaching in various French colleges, especially that of Guyenne at Bordeaux, he went to join his former pupil, Calvin, in Geneva, and helped him reorganize instruction in the Swiss reformed schools. Several text-books of his give a fairly good picture of the teaching practices in the sixteenth century. His De Corrupti Sermonis Emendatione Libellus (A Little Book for the Amendment of Corrupt Speech), which he composed for the use of French scholars, taught Latin through the medium of the mother tongue. His four books of Colloquia (Colloquies), on the other hand, which he published in Switzerland and which gained a wide circulation, showed that the plan of teaching Latin had been changed, the language being now spoken at all times.

French schools were gradually reorganized along humanistic lines in the sixteenth century. One of the first to respond

Humanism in French schools.

to the new movement was the Collège de Guyenne at Bordeaux which has already been referred to. Elie Vinet, its greatest principal, has left us a good description of the work done in that school. The course extended over ten years of classical studies with two additional years of philosophy. Normally the boy would enter the school at the age of six and complete the course by the time he was eighteen or nineteen. Reading and writing in French, together with Latin and religion, were the subjects taught in the first six classes; Greek, rhetoric and mathematics were added in the next three or four. In the last two years Greek and mathematics were continued and the study of science and philosophy was taken up.

Spain and Portugal began to feel the influence of humanism in the second half of the fifteenth century. In the former country the new learning found a generous patron in Cardinal Ximénes, the founder of the University of Alcala, which was munificently endowed and became one of the best institutions in Europe for biblical studies, classical and Oriental languages. To Ximénes' enlightened patronage is also due the first printed edition of a polyglot Bible, giving in parallel columns the Hebrew, Greek, Latin and Chaldaic texts, with dictionaries of Hebrew and Chaldaic. The leading Spanish humanist of this time was Antonio of Lebrija who had studied the humanities in Italy and was connected with the universities of Seville, Salamanca and Alcala. His Latin grammar, Introductiones Latinæ, was for many years most extensively used in Spain. Resende, historian and poet, Bishop Osorio and the Jesuit Alvarez, the author of a grammar very much used in the schools of his Order, were the Portuguese humanists of note during this period.

Humanism in Germany and the Netherlands. Unlike Italy and France, the Teutonic countries did not possess any

¹ Ximénes de Cisneros, Francisco (1436-1517), a member of the Franciscan Order, Cardinal, Chancellor of Castile and later Regent of the kingdom of Spain, pending the arrival of Charles I (Emperor Charles V).

strong connection with the classical past and this fact in the main explains why the spread of humanism in the North of Europe was comparatively late and slow. Some German universities, like Heidelberg and Tübingen, began to respond to humanism in the fifteenth century; Erfurt became a center of the new learning in the closing years of that century and the new universities founded in the course of the sixteenth, like Wittenberg and Marburg, were established on a humanistic basis. Before the end of that century most Germanic universities had been reorganized along the same lines. On the whole, however, it was not the university which was responsible for the propagation of humanism in German lands, but a new religious order founded in 1376 by Geert de Groote (1340-1384) and commonly known as the Brethren of the Common Life.1 The members of this new congregation supported themselves at first by copying manuscripts, but their chief occupation was the education of the poor. The priests among them also preached. Before the end of the fifteenth century they had founded or reorganized many schools in Germany, the Netherlands and the North of France. Some of these schools, like those at Deventer, Zwolle, Louvain, Liège, were large institutions counting as many as two thousand students. At first their instruction was purely elementary; the branches taught were religion, reading, writing, singing and colloquial Latin. Gradually the course was expanded and corresponded to that of the existing mediæval secondary schools and in some instances it even embraced the faculty of arts. When the influence of the Renaissance began to be felt in the North, the Brethren, while retaining much of the old mediæval curriculum, particularly its strong moral and religious element, introduced the new studies in their schools; many of these became centers of humanism in Germany and the Netherlands. Among

The Brethren of the Common Life

¹ From its patron saints, St. Jerome and St. Gregory, the Order was sometimes known as Hieronymians and Gregorians. See Barnard, H., American Journal of Education, IV, 622-628, for a detailed account of their schools.

those who, in one way or another, were associated with these schools, were Nicholas of Cusa, Thomas à Kempis, Erasmus, Pope Adrian VI, Johann Wessel, Rudolph Agricola, the last two sharing with Johann Reuchlin the honor of being the real pioneers of humanism in Germany.

Johann Wessel (1420-1489) received his early education at the Hieronymian school at Zwolle to which he returned as a and the teacher, after studying or teaching the classics in various universities, notably at Paris. Wessel's influence on German humanism was exerted chiefly through his teaching. Rudolph Agricola¹ (1443-1485), like Wessel, was for many years an itinerant student in France and especially Italy, where he spent at least seven years. He returned to the North with a great reputation for scholarship and lectured on the classics in several places, notably at Heidelberg. Like Vittorino da Feltre and Vergerio, he tried to harmonize Christian principles and pagan culture. His humanistic treatise, De Formando Studio (On the Regulation of Study), had a remarkable influence on German schools, particularly those of the Brethren of the Common Life. One of his pupils, though his senior by ten years, was Alexander Hegius (1433-1498) who for a whole generation was headmaster of the school at Deventer. He did much to improve the technique of humanistic teaching and had the honor of training some of the leading humanists in the North, among them von Langen, Murmellius, Erasmus and Dringenberg. The latter, who became rector of Schlettstadt, counted among his pupils the famous preacher, Johann Geiler von Kaisersberg, and the man who shared with Melanchton the honor of being called "Preceptor of Germany," Jacob Wimpfeling (1450-1528). Like Hegius, Wimpfeling had the distinction of training many humanistic teachers. He wrote a

early German

¹ The Latinized form of his original name, Roelof Huysman (farmer). This practice of translating one's name was very common among humanists. Thus Geert (i.e., Gerard = well-beloved) is the original Dutch for Desiderius Erasmus, its Latin and Greek translation, Schwartzerd, the original German for Melanchton, its Greek translation.

number of text-books and educational treatises¹ in which he expounded his conception of a humanistic education — the study of the classics for religious and moral purposes. "Of what use," he says, "are all the books of the world, the most learned writings, the profoundest researches, if they only minister to the vainglory of their authors, and do not or cannot advance the good of mankind? What profits all our learning, if our character be not correspondingly noble, or our industry without piety, or our knowing without love of our neighbour, or our wisdom without humility, or our studying if we were not kind and charitable?"

Of the three classical languages, Latin, Greek and Hebrew, the last one at first received but scant attention from the humanists. The man chiefly responsible for its revival in the North was a friend of Agricola, Johann Reuchlin (1455-1522), the grand uncle of Melanchton. Though a good Latin and Greek scholar, he was chiefly interested in Hebrew, which he taught at the Universities of Tübingen and Heidelberg, and in 1506 published a Hebrew grammar, the first one by a western scholar.2

Desiderius Erasmus.

The most brilliant and influential exponent of humanism in the North of Europe was Desiderius Erasmus³ of Rotterdam, Holland (1466-1536). He began his classical training when nine years of age at Deventer under Alexander Hegius and even at that early age exhibited brilliant intellectual gifts and a remarkable ability to assimilate the new learning. Left an orphan at thirteen, he was sent by his guardians to the school of the Brethren of the Common Life at Hertogenbosch (Bois-1e-Duc), then to the Augustinian Monastery of Emmaus near Gouda. He became a canon regular in 1488 though, he tells us, he felt no real inclination for the life of a religious. The

¹ Of these the most prominent were "Isidoneus Germanicus" (An Introductory Book for Germans), and "Adolescentia" (Youth).

² On the German humanists see Barnard, H., German Teachers and

⁸ Woodward, W. H., Desiderius Erasmus concerning the Aim and Method of Education.



Bishop of Cambray, attracted by his linguistic talents, made him his secretary and ordained him a priest; a little later he was relieved of his claustral obligations and went to Paris to complete his theological studies. Erasmus, however, felt a thorough repugnance for the scholastic methods of the time; he left Paris and began teaching in France and in the Netherlands, working all the while at his Adagia, a collection of the sayings of the ancients. In 1498 occurred his first stay in England, during which he made, at Oxford, the acquaintance of the English humanistic leaders, Colet, Bl. Thomas More and others. Returning to the continent, he took up with enthusiasm the study of Greek at Paris and Louvain and began the long series of his publications with the Adagia, the first edition of which was issued in 1500. The three years from 1506 to 1509 found Erasmus in Italy visiting the great academic centers, greeted with honor by Church dignitaries and leading humanists. At Venice he formed an intimate friendship with the great printer, Aldus Manutius, who induced him to publish another edition of his Adagia. It was on his way out of Italy that he composed his Moriæ Encomium or Laus Stultitiæ, the Praise of Folly, a stinging satire of existing conditions in all classes of society, especially in the Church. The next five years Erasmus spent in England, teaching Greek privately and for a while lecturing on the same subject at Cambridge; most of his time, however, was taken up with literary work. From England he repaired to the Low Countries, where the Archduke Charles, later Emperor Charles V, made him a royal counsellor with a fixed salary and also obtained for him complete release from his monastic obligations, as well as the censures he had incurred for discarding the habit of his Order without ecclesiastical permission. Brilliant and flattering offers were made to him at that time by the King of France to come to Paris, from Archduke Ferdinand to reside at Vienna, from Henry VIII to come back to England, but he invariably declined all invitations to accept a permanent office, wishing to retain complete freedom for the composition and publication of his works. It was about this time that he made the acquaintance of the printer, Froben of Basle, who became his chief publisher and procured for his works a wide circulation. To this period belongs the publication of the Colloquia (Colloquies) a sort of introductory Latin text-book in the shape of conversations on topics of the day. The latinity of the book is pure and elegant, but the tone and much of the material make it unfit for classroom purposes, so much so, that the University of Paris condemned it and Martin Luther in his Table Talk says of it: "If I die, I will forbid my children to read his Colloquies See now what poison he scatters in his Colloquies among his made-up people, and goes craftily at our youth to poison them." In 1521 Erasmus made Basle his permanent residence and there, with the exception of a brief sojourn at Freiburg, he spent the last years of his life, corresponding with his many friends, composing and publishing his works.

During his life-time and for many decades after his death Erasmus had a fame seldom enjoyed by any scholar after him. While much of the praise and admiration which he received was undoubtedly the result of his bitter criticism of the Church and its appeal to the religious partisanship of the time, it cannot be denied that his was a remarkable personality. He was gifted with a keen and brilliant intellect, a wonderful power of expression and a refined literary taste; he was a past master in the use of keen irony and covert sarcasm, and his scholarship, if not profound, was certainly comprehensive and many-sided. On the other hand, his self-complacency, unblushing vanity and fierce egotism were matched only by his moral versatility, which often bordered on duplicity, his malicious spite against adversaries, his freedom in the use of calumnies and the servility of his adulation when it could bring him fame or money. The sixteenth century Reformers looked upon Erasmus as their Precursor and rightly so. His Praise of Folly, his Adagia and Colloquies with their cold skepticism, their contempt for mediæval learning, their wanton attacks upon the Religious Orders, Catholic doctrines and practices, destroyed in many minds all respect for the authority of the Church. His edition of the Greek original of the New Testament with its classical Latin translation and notes undermined the traditional authority of the Scriptures, and the rationalistic spirit which permeates his paraphrases of the New Testament foreshadowed the Protestant appeal to private judgment in matters of faith. Luther could say in all truth that "he had but hatched the egg laid by Erasmus." When the Reformation broke out Erasmus seems to have been at first in full sympathy with it; he only advised Luther to use more moderate language and show more consideration for the Pope and Church dignitaries. He condemned the Bull of excommunication and all violent measures against the Reformers, and suggested a settlement by a court of arbitration composed of scholars. As the conflict grew in bitterness and violence, he withdrew more and more from Luther and affected an attitude of strict neutrality. Only when he saw that he could no longer remain on the fence without losing the confidence of both sides did he take a decided stand against Luther. On the whole, Erasmus' equivocal attitude during the period of religious controversies did little credit to his character and casts serious doubts upon the sincerity of his religious convictions. As a humanist, however, Erasmus' position was never questioned in his day and remains unchallenged. Others surpassed him in depth of scholarship, but none better than he embodied the spirit of the Renaissance and none contributed in so many ways to the spread of humanism, through correspondence, teaching, new editions of the Scriptures and the writings of the Fathers, preparation of text-books and pedagogical treatises. Reference has been made to Erasmus' edition of the New Testament. The latter part of his life at Basle was occupied in preparing and publishing editions of the Fathers: St. Jerome, St. Hilary of Poitiers, St. Ambrose, St. Augustine and others. His aim, it seems, was to popularize the use of the original sources of Christian theology. 1 Much

¹The same tendency is noticeable in many other humanists, and it eventually resulted in a revival of historical studies. The pioneer

of his time during this period was also given to preparing new editions of the classics and new text-books. While in England, he had translated into Latin the Greek grammar of Theodore of Gaza, had published a text-book on Latin composition known as *De Copia Verborum et Rerum* and helped Colet and Lily with their own text-books.

There are scattered in Erasmus' works many references to educational aims, content and processes, but he has expressed his views on these subjects at some length in several treatises: Institutio Christiani Matrimonii (On Christian Matrimony), which contains a chapter on the training of children; De Ratione Studii (On the Method of Study), which he composed for Colet, then organizing St. Paul's School; De Pueris Statim ac Liberaliter Instituendis (On the Liberal Education of Children from Their Earliest Years); De Civilitate Morum Puerilium (On Courtesy of Manners in Boys). Erasmus' conception of education is intensely humanistic; to such an extent, indeed, that he would banish the mother tongue not only from the class-room, but from every-day intercourse. In fact, though he spent many years in England, France and Italy, he hardly paid any attention to the vernacular of these countries, even when living there. "A universal language, Latin, a universal Church, a uniform standard of culture, and perpetual peace"1 sum up his social and educational ideals. The aim of education is stated by him as follows in his De Civilitate: "The first and most important part is that the youthful mind may absorb

work in the latter field is the "Centuries of Magdeburg," published at Basle, in thirteen volumes, in 1559-1574. Each volume dealt with a century of Church history, hence the name of the publication. It shows considerable critical spirit, but it is marred by an unscrupulously partisan coloring and many misrepresentations of Catholicity. From 1588 to 1607 appeared Cardinal Baronius' masterly reply, the twelve volumes of his "Annales Ecclesiastici." At about the same time, the Bollandists, an association of Jesuit scholars, began the monumental collection known as the "Acta Sanctorum," and a little later the Maurists, a congregation of French Benedictines, began their historical researches.

Woodward, W. H., Studies in Education during the Renaissance, p. 113.

the seeds of piety; next, that it may love and thoroughly learn the liberal arts; third, that it may be prepared for the duties of life; and fourth, that it may, from the earliest years, be straightway accustomed to the rudiments of good manners." Erasmus' educational ideal then is far from being a narrow one; it very much resembles that of Vittorino da Feltre. Like him, Erasmus believed that the schools should prepare for active participation in life; the classics, though very valuable in themselves, nay, an indispensable element of a liberal education, are but a means for this preparation for life; they do not even occupy the first place which belongs to religion, inasmuch as a sound moral training, the chief end of education, is impossible without religion. Wealth, or birth, or sex should not determine the kind of education that a child should receive. The children of the poor and lowly born, if they show the ability, should share in the blessings of a liberal education; neither should women as such be debarred from it. Like Vives, whose early writings on the subject seem to have influenced him, Erasmus believed that women are entitled to the benefits of a liberal education and that family and society have much to gain from it.

Erasmus deals at some length with the early training of the child; in fact, in at least one of his treatises, he is chiefly concerned with this early phase of the educative process. He insists on the importance of the home environment and the constant attention which body and mind should receive from the very beginning. The first teacher is the mother; from her the child receives its first training in good habits, its first lessons in language and knowledge of surroundings. This early instruction should be informal and should be made as interesting as possible. Stories, pictures, games, should be used whenever possible. Thus, for example, the letters of the alphabet could be learned through ivory tablets and letter-shaped biscuits. Systematic instruction begins at the age of six or seven, at home if possible, otherwise in a day-school, and it should be

¹ De Pueris Statim ac Liberaliter Instituendis.

thoroughly humanistic. Grammar is not to be studied for its formal value as before, but only in so far as is necessary to understand the text. On this point Erasmus says in the opening paragraphs of his De Ratione:

"But I must make my conviction clear that whilst a knowledge of the rules of accidence and syntax is most necessary to every student, still they should be as few, as simple, and as carefully framed as possible. I have no patience with the stupidity of the average teacher of grammar, who wastes precious years in hammering rules into children's heads. For it is not by learning rules that we acquire the power of speaking a language, but by daily intercourse with those accustomed to express themselves with exactness and refinement and by the copious reading of the best authors. Upon this latter point we do well to choose such works as are not only sound models of style, but are instructive by reason of their subject matter. . . . Some proficiency in expression being thus attained, the student devotes his attention to the content of ancient literatures."

The texts to be studied are the Scriptures, the Fathers and the classics; they should be supplemented by all the subjects which can help the student to get a better understanding of the content: geography, history, architecture, music, astronomy, etc. All the branches of the curriculum, whether sacred literature, the classics or supplementary subjects, are to be studied chiefly for their content, for the light they can throw on life, its meaning, its duties and responsibilities. Erasmus' humanism then was a very broad one, very akin to what is sometimes called "humanistic realism" such as we find it in Rabelais' or Milton's conception of a liberal education.

Perhaps the most comprehensive and certainly the most Juan Luis thoroughly Christian treatment of education by a Catholic lay- Vives. man in the sixteenth century is that of the Spanish humanist and philosopher, Juan Luis Vives¹ (1492-1540), a friend of Budaeus, Erasmus, Bl. Thomas More, and one of the leading humanists during the early Reformation period. Vives was a teacher by profession, and besides much tutoring work, he lectured for several years at Louvain and Oxford, but most of his time, it seems, was given to writing. His works, which are

¹ Barnard, H., American Journal of Education, XXVII, pp. 340-352. Watson, F., Vives and the Renaissance Education of Women.

very numerous, deal with theology, devotional practices, philosophy, political economy, the classics and education. Some of these works were very popular during the author's life-time, being translated into several languages and going through many editions. Vives' views on education are to be gathered from a number of treatises, particularly his De Tradendis Disciplinis (On the Transmission of Learning), which is animated throughout with a sound, progressive spirit and was a source of inspiration for later educators. Every important topic is taken up and treated in a way which often appears remarkably modern. He dwells at great length on the importance of home education and the duties of parents in this matter; he insists on the value of a good location for the school, the care with which teachers should be selected and their preparation. The essential qualifications of a good teacher, according to Vives, are the ability to teach, character, devotion to one's calling and ability to get along with one's fellow-teachers. He advocates teachers' meetings to discuss the plan of studies, and teaching under supervision as a part of the preparation for class-room work. He believes that students should have some measure of selfgovernment, plenty of physical exercise and that their health be looked after by the teacher. Girls should not only be trained in the household arts, but should receive their ample share of the culture imparted to their brothers. Most remarkable perhaps in a sixteenth century humanist is Vives' attitude towards the modern languages. The vernacular should be the first language to be taught in the class-room and the teacher should endeavor to develop in the students the ability to use it fluently and correctly. Proficiency in Latin is to be striven after, since Latin is the language of the cultured, but this should not be at the expense of other languages, or history or the sciences. In his treatment of method, Vives insists on the value of imitation, self-activity and the use of induction as a means to develop the pupil's power of observation and investigation.

¹ In his work, "De Subventione Pauperum" (On the Relief of the Poor), he shows himself a remarkable organizer of public relief.

As noted before, the schools of the Brethren of the Com- Humanism mon Life were among the first in the North of Europe to re- in Teutonic schools. spond to the new learning and, through their pupils, to spread it to other institutions. But in the North of Europe as in Italy, new schools appeared as a consequence of humanism. Fürstenschulen¹ (Schools for Princes) belonged to this class; they were founded by the reigning German houses and in many respects resembled the Italian court schools. They were intended to train the sons of native citizens, chiefly those of the nobility, at public expense, for service in Church and State. They were under the control of the court and, being boarding schools with a rather rigid discipline, they had a complete control over the life of the boys. Their course of study was humanistic, but more comprehensive than that of the gymnasium.² The latter, the most typical of humanistic schools in the North of Europe, grew out of the old cathedral and burgher schools by the substitution of humanistic studies for the old scholastic curriculum; classical Latin took the place of mediæval Latin, mathematics that of dialectics, Latin and Greek classical literature that of grammar and rhetoric, and in some instances Hebrew and the Greek New Testament were also added. The first burgher school to add poetry, i. e., classical literature, to its curriculum, was that of Nüremberg in 1495; its example was soon followed by other burgher schools and before the middle of the sixteenth century the term gymnasium came to be used

¹ Also known as Klosterschulen (cloistral schools) because they were commonly endowed from secularized monastic property; sometimes they are referred to as Landeschulen. These schools, like some schools of the Brethren of the Common Life, were afterward incorporated as gymnasia into the German States' school systems. See Russell, J. E., German Higher Schools, passim, especially pp. 196-198.

² The term had already been used in Italy, and it was derived from the Gymnasia of Ancient Greece, where boys of the well-to-do received their training from sixteen to eighteen. Likewise, the modern academies and lycées (French state secondary schools) received their names from Plato's academy and Aristotle's lyceum in Athens. The English and American grammar school received its name from the chief subject of study.

to designate classical secondary schools controlled by the city and receiving only day scholars.

The most famous and most influential of these early gymnasia was that organized in 1536 at Strassburg by Johann Sturm (1507-1589). From his Plan of Organization, his Letters to the Masters and the record still preserved of a general examination held in the school in 1578, we obtain a fairly good idea of the organization of that school and its work. According to Sturm, education has a three-fold aim: piety, knowledge and eloquence. Piety was to be developed through the study of the Lutheran creed and catechism; knowledge meant chiefly acquaintance with the Latin and Greek classics; eloquence the ability to speak and write Latin with fluency and elegance. Aside from some elementary instruction in music, geometry and astronomy, the whole work of the school was devoted to religious training and the study of Latin and Greek.² Religious instruction was based on the Lutheran catechism, the Sunday Sermons, the Epistles of St. Paul and the Letters of St. Jerome. In the study of the classics, several years were devoted to drill on grammar and the memorizing of words and expressions used in every-day life. The study of authors, both grammatical and literary, was then taken up with an abundance of exercises in composition, declamation, disputations and the rendering of plays. The range of reading was wide, but Cicero was the favorite author, the ability to use his latinity in speech and writing being the goal to which the efforts of the students were directed. A narrow, formal education if there ever was; yet the Strassburg school proved an enormous success, attracting students by the thousands; the advice of its headmaster was eagerly sought by princes and educators; his plan of studies became the pattern for many other schools, both in and out of Germany, his text-books were widely used and he trained hundreds of teachers and many leaders in Church and State in

² For a detailed exposition of this course see Barnard, H., German Teachers and Educators, pp. 196-268,

¹ "De Literarum Ludis Recte Aperiendis Liber" (On the Best Method of Opening Institutions of Learning).

Protestant countries. The German gymnasium remained practically as Sturm had left it until the middle of the eighteenth century, when a new revival of classicism took place in Germany with Greek instead of Latin as its center; in the last two generations a little more science and the modern languages have been introduced into its curriculum; more attention is given to the mother tongue, but the classics have remained to this day the central subjects.1

Humanism in England. The first signs of the influence of the Italian Renaissance in England² appear in the fourteenth century. Chaucer's Troilus and Cressid, and his Canterbury Tales show unmistakable evidence of the influence of Boccaccio's Il Filostrato and Decameron. The impetus to the new beginnings. learning in England, however, did not come until the following century. Chrysoloras and Poggio, it seems, sojourned in England for some time, and the Englishmen who visited the Council of Basle must have come into contact with a number of humanists who had gathered there, but the real pioneer of the movement seems to have been Humphrey. Duke of Gloucester (1391-1447), a diligent student of classical Latin and a generous patron of the new learning. Other Englishmen of note, like John Tiptoft, Earl of Worcester, William Grey, Bishop of Ely, John Free, Bishop of Bath, were ardent promoters of humanism in England. Two monks of Christ's Church, William Selling and William Hadley who had studied in Padua, Bologna and Rome, were, it seems, chiefly responsible for the

¹ The gymnasium, like all classical schools in other lands, met the needs of only certain classes of the population: those preparing for service in the Church or State or the law or teaching. Those intending to prepare for a commercial career had for a long time to depend on elementary vernacular schools, or writing and reckoning schools, on business experience and travel. It was only in the eighteenth century that secondary schools began to appear which met the needs of the commercial class.

² Creighton, M., The Early Renaissance in England; Gasquet, F. A., Eve of the Reformation; Woodward, W. H., Education during the Renaissance.

introduction of the systematic study of Greek in England, but the first English humanists of note were three Oxford professors: Thomas Linacre, a pupil of Selling, William Grocyn and William Latimer, who had studied in Italy and upon their return to England undertook to introduce and foster the study of Greek at Oxford. Of the three the most brilliant by far was Thomas Linacre. During his stay in Italy he had not only studied the classics, but also medicine and he had been a fellowstudent in Florence of the future Pope Leo X with whom he formed a lasting friendship. His chosen specialty at Oxford was medicine, but he also lectured on Latin and Greek and numbered among his pupils Erasmus, Bl. Thomas More and Colet. He founded the Royal College of Physicians, endowed chairs of Greek and Medicine at Oxford and Cambridge and exerted a wide influence through his extensive correspondence, his translations from the Greek and works on Latin grammar.

Within a few years the example of Oxford was followed by Cambridge. The organization of humanistic studies in the latter university took place in the early part of the sixteenth century, during the chancellorship of Bishop Fisher, who succeeded in having three humanistic colleges founded and endowed. Erasmus taught Greek for some time at Cambridge. while a professor of Divinity there. Other noted professors of Greek during the same period were Sir John Cheke who resigned his professorship to become Latin tutor to Prince, later King Edward, and Roger Ascham who had succeeded Cheke in the chair of Greek and, like him, had to relinquish it within a few years to become a tutor to another member of the royal family, the future Queen Elizabeth, whose Latin secretary he became later. Ascham's reputation in England after his death was due chiefly to his posthumous educational treatise The Schoolmaster, one of the first works of this kind to be written in the vernacular. Though purporting to be a general discussion of humanistic education, the book, as the title would suggest, is chiefly devoted to a discussion of the method to be used in the teaching of the classics. Specially worthy of note

Roger Ascham's Schoolmaster is his famous method of double translation which he explains as follows:

"First, let him [the schoolmaster] teach the child, cheerfully and plainly, the cause and matter of the letter; then let him construe it into English so oft as the child may easily carry away the understanding of it; lastly, parse it over perfectly. This done thus, let the child, by and by, both construe and parse it over again; so that it may appear the child doubteth in nothing that his master taught him before. After this, the child must take a paper book, and sitting in some place where no man shall prompt him, by himself, let him translate into English his former lesson. Then, showing it to his master, let the master take from him his Latin book, and pausing an hour at the least, then let the child translate his own English into Latin again in another paper book. When the child bringeth it, turned into Latin, the master must compare it with Tullie's book and lay them both together; and where the child does well, either in choosing or through placing of Tullie's words, let the master praise him and say, 'Here ye do well.' For, I assure you, there is no such whetstone to sharpen a good wit, and encourage a will to learning as is praise."

Two other noteworthy features of Ascham's discussion are his opposition to the harsh discipline of the time and his opposition to the then common practice of traveling for educative purposes.1

Another educational treatise in the vernacular, and one which preceded Ascham's Schoolmaster and influenced it more or less was the Governour2 of Sir Thomas Elyot, a lawyer and clerk of the Council under Henry VIII. Much more fully and than Ascham, Elyot expresses the early and broad conception Thomas Elyot's of education. Aside from the influence of these educational Governour. treatises and the work of classicists at Oxford and Cambridge. the cause of humanism in England was furthered by the supporters of the new learning at the court of Henry VIII, especially Bl. Thomas More, a staunch friend of scholars and humanists and the author of an essay, Utopia or the Kingdom of Nowhere, which reminds one of Plato's Republic; it is the description of an ideal commonwealth in which education is universal and all questions of labor, social relations, government, religion and education are easily settled by plain common sense.

¹ Cf. Montaigne's opinion on the educative value of travel, p. 209.

² See Woodward, W. H., Education during the Renaissance, chapter XIII. 1.

More's views on education, however, are best expressed in his letters to his children and their instructors.¹

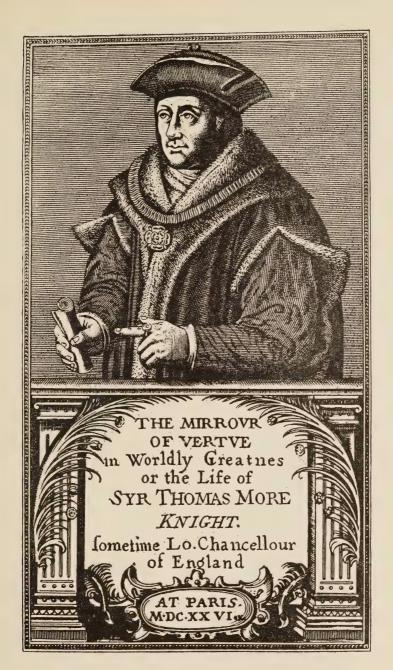
Humanism in English schools. In England, as on the continent, the Renaissance led to the foundation or reorganization of secondary schools along humanistic lines. First and foremost of this new type was St. Paul's school in London, remodeled in 1509 by John Colet, a pupil of Grocyn and Linacre, who had spent several years of study abroad and had been made Dean of St. Paul's Cathedral in London shortly after his return to England. At the suggestion of his friend Erasmus, Colet took advantage of his new position to make of St. Paul's a center for the new learning. From the statutes which he drew for the school we learn that boys were to be admitted free² but would be dismissed "after reasonable season" if "proued be founde here vnapte and vnable to lernynge." The only scholastic requirement for admission was the ability to read and write.³ The work of the school is outlined by Colet as follows:

"As towchyng in this scole what shalby taught of the maisters and lernyd of the scolers, it passith my wit to devyse and determyn in particuler but in generall to speke and sum what to saye my mynde, I wolde they were taught all way in good litterature both laten and greke and good auctors suych as haue the veray Romayne eliquence joyned with wisdome specially Cristyn auctors that wrote theyre wysdome with clene and chast laten other in verse or in prose, for my entent is by thys scole specially to incresse knowledge and worshipping of god and oure lorde Crist Jesu and good Cristen lyff and maners in the Children And for that entent I will the Chyldren lerne ffirst aboue all the Catechyzon in Englysh and after the accidence that I made or sum other yf eny be better to the purpose to induce chyldren more spedely to laten spech And thanne Institutum Christiani homines which that lernyd Erasmus made at my request and the boke called Copia of the same Erasmus And thenne other auctours Christian as lactancius prudentius and proba and sedulius and Juuencus and Baptista Mantuanus and suche other as shalby tought convenyent and moste to purpose vnto the true laten spech all barbary all corrupcion all laten adulterate which ignorant blynde folis brought into this worlde

⁸ The age of admission in schools of this type was seven or eight. The boy had to go through eight classes or "forms" to complete the course of study.

¹ See Watson, F., Vives and the Renaissance Education of Women.

² This was no exception to the practice in these and previous times. Endowments either from ecclesiastical or public or private sources usually obviated the necessity of charging fees.



BL. THOMAS MORE

and with the same hath distayned and poysenyd the olde laten spech and the varay Romayne tong which in the tyme of Tully and Salust and Vergill and Terence was vsid, whiche also seint Jerome and seint ambrose and seint Austin and many hooly doctors lernyd in theyr tymes. I say that ffylthynesse and all such abusyon which the later blynde worlde brought in which more ratheyr may be callid blotterature thenne litterature I vtterly abbanysh and Exclude oute of this scole and charge the Maisters that they teche all way that is the best and instruct the chyldren in greke and Redyng laten in Redyng vnto them suych auctours that hathe with wisdome joyned the pure chaste eloquence."

Colet, it seems, had hoped for some time that Erasmus would be the headmaster of his school; failing in this he secured for that position William Lily, an Oxford scholar, whose name is connected with the grammar which was for centuries one of the standard English text-books.

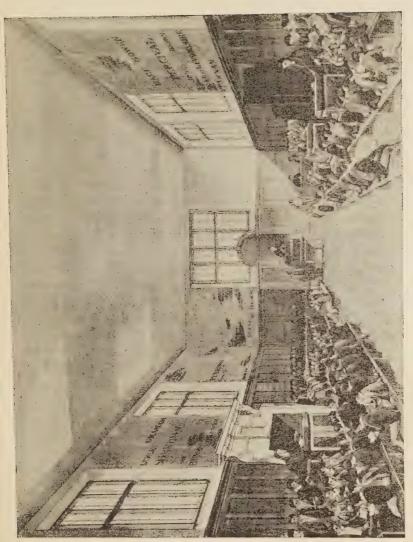
At the time of the foundation of St. Paul's, there were in England hundreds of secondary schools of various origin: many were connected with monasteries or cathedrals or collegiate churches; others owed their origin to a gild, or a parish chantry foundation, or some other benevolent foundation independent of Church or State. A large number of these schools were suppressed as a consequence of the confiscation of ecclesiastical foundations by Henry VIII and Edward VI. Those which survived and those founded afterwards were organized along the same lines as St. Paul's. The old Latin grammar school of colonial times was the American counterpart of the English grammar school.

The General Educational Result of Humanism. There now remains to try to ascertain the general educational result of the revival of learning. The seven liberal arts, which for

¹ On these various types of schools see Vol. I, pp. 137-141.

² The best known of these are the so-called "public" schools, some of which, like Winchester and Eton, were founded before the sixteenth century, others, like Rugby, Harrow, Marlborough, in or after that century. The distinction between the "grammar" and the "public" school, not a very clear one, seems to lie in this: that the latter has a more aristocratic patronage and greater wealth than the former. Classical studies, sports and religious training were the chief features of the organization of these schools, which remained practically unchanged until the middle of the nineteenth

century.



HARROW

Reorganization of the curriculum of the secondary school centuries had formed the secondary school system of studies, were replaced by a new organization of school disciplines. Logic, the queen of the mediæval branches of studies, was dethroned by grammar and rhetoric, which were now no longer considered as preparatory subjects for the study of philosophy, but as branches of prime importance, the very core of the course of studies. Logic was retained, but merely as an adjunct to the study of grammar and rhetoric, all three preparing for the elegant, refined expression of thought, the fari posse, which became more and more the aim and touchstone of a liberal education. With this change in the position of logic there came a corresponding one in its content. Cicero and the other orators, no less than Aristotle and Plato, were now drawn upon to supply the rules of logic. In fact, some humanists even went so far as to assert that the study of the methods of the orators was a far better guide for the mastery of the rules of logic than the study of the Organon of Aristotle.1

The subjects which made up the old quadrivium were for some time retained in a somewhat modified form, but by the middle of the sixteenth century they were neglected in most secondary schools, a fact that may appear all the more strange when one considers that this was the age of Copernicus, Galilar and Marler?

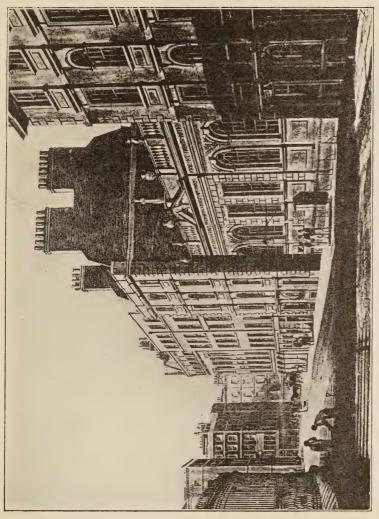
leo and Kepler.2

By far the most important subject in the humanistic course of studies was Latin and so it remained in all secondary schools until the eighteenth century, in many until well into the nineteenth. The reasons for this emphasis upon the study of an ancient language are not far to seek. Aside from its cultural value, Latin was still then, as it had been in mediæval times, not only the language of the Church, but that of the university

with Latin as a core

¹ For example, Petrus Ramus (+1572), who tried to reform logic on the principle that rhetoric and logic are two parts of the same science (Aristotelicæ Animadversiones, and Institutiones Dialecticæ).

² In a letter to Kepler, Galileo complains that the teachers at the Padua and Pisa gymnasia have not the least interest in astronomy and physics. See Zöllner's Wissenschaftl. Abhandl., II, p. 941.



lecture hall, of text-books and scientific literature, legal documents, diplomatic intercourse and foreign travel. Says Leach:

"The learned professions required a competent knowledge of Latin far more directly then than now. A need for Latin was not confined to the Church and the priest. The diplomatist, the lawyer, the civil servant, the physician, the naturalist, the philosopher, wrote, read and, to a large extent, spoke and perhaps thought in Latin. Nor was Latin only the language of the higher professions. A merchant or a bailiff of a manor, wanted it for his accounts; every town clerk, or gild clerk wanted it for his minute book. Columbus had to study for his voyages in Latin; the general had to study tactics in it. The architect, the musician, everyone who was neither a mere soldier nor a mere handicraftsman, wanted, not a smattering of grammar, but a living acquaintance with the tongue, as a spoken as well as a written language." 1

Of the Latin authors Cicero was by far the most widely read. His letters were considered models of epistolary style and they formed the Latin elementary readers. He also was looked upon as the prince of orators and philosophical writers. Historical works were read, though, in many places, chiefly on account of the orations they contained. Virgil, Ovid and Horace were the favorite poets, but Plautus and Terence were also used quite extensively in many schools on account of their value for conversational Latin; the teacher was supposed to minimize, as best he could, the effect upon the young of the immoral content of their plays. There were also read selections from the Scriptures and Fathers of the Church, and the study of the catechism, begun in the vernacular in the lower classes, was quite commonly continued in Latin in the higher forms. All through the course of study there was much emphasis on drill in grammar and oratory. The mediæval textbooks used in the teaching of these branches had been rejected as barbaric, but those which took their place were just as unwieldy and the two subjects continued to be taught in the most abstract fashion.² The only change worthy of note which took

and emphasis on its disciplinary value.

¹ Leach, A. F., English Schools at the Reformation, p. 105.

² A seventeenth century writer complains that the pupils were compelled to commit to memory no less than 180 technical terms and more than 70 rules of syntax with as many exceptions, some of which were obscure even for a mature mind. See Raumer, Geschichte der Pädagogik, III, p. 83.

place in class-room procedure was brought in by the invention of printing and the manufacture of paper. The use of a textbook by the class took the place of dictation of the text by the teacher and the written composition, to a great extent, took the place of oral work.

Among the early humanists, especially in Italy, Greek was valued as highly as Latin and some of them, following the advice of Quintilian, taught Greek before Latin. Many programs of studies in the sixteenth and seventeenth centuries state that the study of Greek should begin with that of Latin and they give long lists of authors to be read: Æsop, Xenophon, Plutarch, Chrysostom, Basil, Gregory of Nazianzus, Homer, Hesiod, Pindar, Demosthenes, Plato, etc.; that, however, seems to have been a desideratum rather than an actuality. The common subjects practice seems to have been to consider Greek as a mere adjunct to Latin. To cite one instance, Sturm's course of study, which was followed in many schools, allotted to Greek only half the time given to Latin. Especially after the sixteenth century did the position of Greek fall far below what it had been in the fifteenth; in many places the language came to be looked upon in the same light as Hebrew, a subject which was of value only to those who intended to prepare for the ministry or medicine. By the middle of the sixteenth century the study of the classics had become chiefly one of style and so it remained with few exceptions for the next three hundred years. The study of the content, which had been such a prominent factor in early humanistic education, was either entirely neglected or took the form of information on classical antiquities, eruditio, given incidentally in connection with the study of form.

As remarked before, the Renaissance ventures into the field of philosophy were barren of any serious results. The attempts to revive the ancient philosophy remained confined to private circles and the new philosophies which appeared in the course of the sixteenth and seventeenth centuries were, for a long time, barred from the class-room. The work of the school in this subject, whenever it was taught, continued to be done

of all other minimized.

along the lines of mediæval practice with some slight changes in terminology and method. History and geography now began to receive recognition as separate subjects, in at least some schools. As early as the beginning of the seventeenth century we find special historical works assigned to each class in some of the Jesuit colleges in Germany and at about the same time there was given special instruction in geography in most Jesuit colleges in France.

A very common practice of the sixteenth and seventeenth centuries was to supplement the study of eloquence with the reading of some compendium, purporting to contain all that was worth knowing: biographies, geography, history, sciences, philosophy, classical antiquities, etc. "Pansophy," "cyclopedia," "encyclopedia," "polymathy," are some of the titles used to designate these collections of odds and ends, but there were many others. Some of these cyclopedias not only present the materials of knowledge, but also discuss the methods of teaching them. Gradually this tendency towards encyclopedic knowledge changed to actual antagonism to the formal study of the classics and developed into what is commonly referred to as educational realism.

Owing to the cultural value of Latin and its practical importance, the modern languages received but scant attention in the schools of the fifteenth and sixteenth centuries. Erasmus boasted his ignorance of all modern idioms and there were many educators who shared in his opinion that a knowledge of the classical languages, especially Latin, was all-sufficient for the cultured man. Even then, however, at least in Latin Europe, the ability to use the vernacular correctly, if not elegantly, was considered one of the essentials of culture. We had occasion to remark before that Vives, among others, insisted on a careful training of the pupil in the use of his mother tongue, and

² Some of these ventures into the field of methodology showed a genuine originality; others were nothing else than a revival of mediæval practices, as e.g., Mnemotechnics and the Ars Magna of Raymond Lully (1234-1315), whose aim was to use the association of ideas in the search for thoughts.

it is also significant that it was in the sixteenth century that the foundations were laid by humanists for the grammatical study and uniform spelling of the vernaculars.¹ Religious instruction had never ceased to be a part of the curriculum of the schools and so it remained until the end of the eighteenth century.

The Latin schools of the Renaissance assumed different names: collegium, athenæum, gymnasium, lyceum. They usually offered a course of study of five or six years, sometimes of seven or eight, or even ten, as in the case of Sturm's Gym- Institutional nasium at Strassburg. Some Latin schools, known as pæda- results. gogia, or "trivial" schools, offered only a three or four year course of study. The larger ones often offered university lectures and could confer the baccalaureate; some of these developed into universities, as, e.g., the Nüremberg Gymnasium, which was converted in 1575 into the Altorf University. All these Latin schools prepared directly for public life or entrance at the university. The latter continued to prepare, as before, for the professions, but now had lectures on Latin and Greek, and in some institutions Hebrew, added to its curriculum. Humanism did not directly affect the elementary schools, but in many places their scope overlapped with that of the secondary schools, just as the latter often encroached upon the curriculum of the universities. This lack of definiteness in aim and scope is one of the characteristics of elementary and secondary education before the nineteenth century.

QUESTIONS FOR DISCUSSION

- 1. Considering that Italian had already reached literary perfection by the beginning of the fourteenth century, what could be the influence of humanism on the language?
- 2. What were the characteristic features of humanism in the south of Europe?
- ¹ The influence of humanism on the western languages extended, of course, far beyond the scope of grammar, but cannot adequately be treated here. The student is referred to histories of the modern languages and literatures.

- 3. What were the characteristic features of humanism in the north of Europe?
- 4. What have been the permanent contributions of humanism to education?
- 5. Compare Sturm's Gymnasium with da Feltre's Pleasant House as to aim and content of education.
- 6. In what does the Renaissance conception of a liberal education essentially differ from that of the Middle Ages; from our own?
- 7. Was Erasmus' dream of a universal language possible of realization in his own time?
- 8. Account fully for the narrowing of the humanistic conception of education.
- 9. Account for the fact that Latin, not Greek, became the more popular classical language of the Renaissance.
- 10. What has been the influence of humanism on the development of the national languages and literatures?

SOURCES

Ascham, R., The Schoolmaster.

Budé, G., De l'Institution du Prince.

Elyot, T., The Boke Named the Governour.

Norton, A. O., Readings in the History of Education.

Robinson, J. H., Readings in European History.

Vives, J. L., De Disciplinis Libri XX.

Whitcomb, M., A Literary Source Book of the Italian Renaissance. Source Book of the German Renaissance.

Woodward, W. H., Vittorino da Feltre (contains translations of educational treatises by Italian humanists).

Erasmus concerning Education (contains the De Ratione and De Pueris).

REFERENCES

Barnard, H., English Pedagogy.

German Teachers and Educators.

The American Journal of Education, Vols. IV and VII.

Burckhardt, J., The Civilization of the Renaissance in Italy.

Drane, A., Christian Schools and Scholars.

Jebb, R. C., Humanism in Education.

Laurie, S. S., Educational Opinion Since the Renaissance.

Leach, A. F., English Schools at the Reformation.

Quick, R. H., Educational Reformers.

Sandys, J. E., A History of Classical Scholarship.

Woodward, W. H., Education During the Renaissance.

CHAPTER IV

WHAT THE REFORMATION WAS

HE Causes. The social and religious movement which is commonly referred to as the Reformation¹ had a deep and far-reaching influence on the thought life and institutions of Europe. Before attempting to examine its influence on education, it may not be out of place to trace it to

its causes and survey the first stage of its development. Ostensibly, the aim of the Reformation was the removal of abuses in the Church, a reform of "Her head and members," as the phrase went; in reality the movement led to a revolt against her authority, a rejection of her fundamental doctrines and a breaking up of Catholic unity. The causes of this revolution, which have already been referred to in Chapter I, can all be reduced to a weakening of the bonds which, in the previous centuries, had held together the western Christian nations.

During the Middle Ages the Papacy had been the powerful center of the Christian nations in the West. The Pope was then looked up to as the defender of right and justice against might, the protector of the weak and the defenseless, the acknowledged arbitrator in public and private disputes. Papal laws were accepted everywhere in Catholic Christendom as public laws and the Pope's advice and approval were eagerly sought on questions of temporal jurisdiction, on wills, donations, the foundation of charitable and educational institutions, internal legislation, disputes between government and governed or between States. Nations, kings and princes again and again formally placed themselves under his protection, and, like the Emperors, the Popes had repeatedly conferred royal and princely titles. In union with the bishops, with the

The mediæval prestige of the Papacy

¹ More appropriate would be the term Protestant Revolution.

secular clergy and religious orders, the Popes had worked a complete reconstruction of the western nations and developed a splendid civilization, the benefits of which we enjoy to-day.

Our whole system of education is a distinctly mediæval inheritance. We have, indeed, enlarged the curriculum, perfected organization and equipment, made attendance compulsory in the matter of elementary education, but the Middle Ages had the merit of laying the foundations upon which subsequent generations have reared the edifice. The splendid system of charitable institutions of which the modern world is so justly proud had the same origin; art developed in the protecting shadow of the cathedrals, and the cloister was for ages the only shelter and nursery of learning. The work of transformation and social uplift had been now and then retarded by periods of strife between the ecclesiastical and lav authorities, but reverence for the Holy See and respect for its authority had never been seriously questioned and the civil governments had, on the whole, worked in harmony with the Church for the welfare of the Christian family.

In the fourteenth century a succession of unhappy events left the authority of the Pope most seriously impaired. The transfer of the Papal residence from Rome to Avignon obscured in the minds of many the universal character of the Church; the quarrel with the Emperor Louis, the Bavarian, and the Fraticelli² weakened still more the prestige of the Holy See, but the severest blow came from the Western Schism (1378-1418), which tore the Church into different obediences, each one of which claimed as its rightful head the authority of a different Pontiff. In the course of all this turmoil, new

weakened by the Schism,

¹ A quarrel concerning the respective rights of Pope and Emperor. Louis' extravagant claims as head of the State were supported by the controversialists he had gathered around him, among them the Englishman William Occam. These men produced a number of books in which are set forth doctrines implying a complete revolution of the existing order. The best known of these books is the Defender of Peace (Defensor Pacis). See Hearnshaw, F. J., The Social and Political Ideas of Some Mediæval Thinkers. ² Heretical sects which separated from the Franciscan Order on the question of poverty and denied the infallibility of the Pope.

revolutionary doctrines concerning the government of the Church, and the respective authority of Pope and General Council were formulated and spread broadcast, The most radical innovations, however, were those of John Wyclif in heresies England and John Hus in Bohemia; these innovations attacked dogma itself and amounted to nothing else than a new creed and a new code of morality. These doctrines were condemned by ecclesiastical councils, but they left seeds that were to bear fruit in the sixteenth century.

Meanwhile, there had developed in every country a national consciousness which, to a great extent, was antagonistic

had been left in charge of the Church. Now the State not only claimed sole control of secular matters, which, though something new, was to a great extent justifiable, but it showed an ever-increasing tendency to interfere in purely ecclesiastical affairs and to place the Church in a subordinate position. The troubled religious conditions of the West during the Great Schism, the concessions made by rival Popes to gain additional states to their own allegiance, and the further concessions of some of the fifteenth century Popes to buttress their authority in the face of anti-papal tendencies, all resulted in encouraging the disposition of national rulers to treat the Church as a national institution, while the growing international jealousies widened the rift between Christian states. The net result of it all, so far as the Church was concerned, was a loss of prestige and a weakening of the bonds of her unity. Certain phases of the Renaissance, as we have seen before, were another source of danger to the Church. The revival of the literature and art

to Christian unity. Princes and governments were seeking to control all matters of a national character without any regard the rise of the national for the traditions of Western Christendom, or even the unde-spirit, niable rights of the Church. In mediæval times, due to the intimate union between the religious and secular life of the age, the vast landed interests of the Church, gratitude for her immense services and the recognition of her enlightened leadership, many matters of a purely temporal or mixed character

of ancient Greece and ancient Rome brought in its wake a revival of pagan views of life and morality, which were spread through the dissemination of immoral poems, romances, songs of the pagan writers and their Renaissance imitators. The Christian ideal became obscured; desire for worldly fame and material gain, love of luxury, love of ease and pleasure became the philosophy of life among the higher classes and intellectuals.

the attacks of the radical humanists

Great harm to the Church's prestige was also done by the biting satires of the younger humanists on ecclesiastical institutions and ecclesiastical life, and it must be admitted that the condition of the clergy was far from what it should have been. Material interests, political power and public prestige, a life of ease and luxury, instead of pastoral solicitude and renunciation of worldly interests, were too often the rule among the higher ecclesiastics, while the lower clergy were oppressed and their professional training sadly neglected. The conditions of many monasteries, both of men and women, also left much to be desired. The occasion of all this evil was the very wealth of the Church, which tended to draw into the ranks of the clergy large numbers of young men who had very little, if any, religious vocation. In every country the nobility had come to look upon Church benefices² as a convenient means to endow the younger sons of the family.3 Mere boys would be ap-

¹ During the second half of the fourteenth century, in many districts, this lack of proper training among the clergy should be ascribed, partly, at least, to the Black Death, which spread all over Europe around the middle of the century and carried away more than one-third of the population. Many priests and members of religious congregations fell martyrs to their duty in ministering to the plague-stricken population. As a consequence, young clerics came to positions of responsibility for which they had not been adequately prepared.

² Ecclesiastical positions with some endowment.

⁵ This practice was looked upon as a matter of course, even in the best of families. Thus St. Charles Borromeo, the son of very pious parents, was the abbot of a rich Benedictine monastery when only twelve years of age. Later on, one of his first acts as archbishop of Milan was to give up a number of abbeys which had come to him through his family connections.

pointed to responsible positions in the Church; the duties of the office were entrusted to a priest, while the administration of the property was attended to by the relatives of the young abuses in incumbent. Another evil practice which had become very common was to confer several Church benefices on the same person. Thus the same man might at the same time be the bishop of two or three dioceses; he was supposed to perform the duties of one diocese while a competent priest, appointed by him, would be in charge of the others. This abuse, bad enough in itself, was still further aggravated by the fact that too often nepotism, instead of the personal merit of the candidate and the spiritual interests of the faithful, determined appointment to responsible positions in the Church. It was this evil practice which was the chief cause of that spirit of worldliness conspicuous among high Church dignitaries everywhere, Rome included

the Church.

This deplorable state of affairs within the Church lent some color to all kinds of charges against her administration and doctrines, and it furnished welcome weapons to the greed of princes, but it has been immensely exaggerated by humanistic pamphleteers and would-be reformers. Side by side with a regrettable laxity in certain sections of the clergy, there was to be found in many great piety, 1 love of learning, zeal for the diffusion of religious truth through sermons, catechetical instructions, teaching in elementary and secondary schools, vitality of the through books and tracts, the many editions of which show the Church was interest the people took in these questions. If there was much impaired. religious indifference, much cynicism, laxity and moral turpitude among the higher classes, there was still preserved much that was good and admirable among the middle and lower classes. Their faith had nowhere been seriously impaired, their sense of loyalty and devotion to the Church was still deep and genuine and was shown in the splendid way the great Jubilee Years of 1450, 1475 and 1500 were celebrated. Works of charity had never been more abundant than during this

¹ On this point see Pastor-Antrobus, History of the Popes, Vol. V.

period; in Italy alone three hundred and thirty-four charitable institutions, schools for the poor, hospitals, foundling asylums, orphanages, were founded between the years 1399 and 1524.

On the whole, the condition of Western Christendom on the eve of the Reformation was a mixture of good and evil such as had obtained more than once in the history of the Church. There was need of and a widespread demand for reform, and reforms had been instituted, though not thoroughly enough, but there was no desire on the part of the population for a religious apostasy. Martin Luther, whose doctrines, be it remarked in passing, were not entirely new, would have had a very scanty following, were it not that these doctrines were a convenient cloak for the greed and lust of princes who were otherwise perfectly indifferent to all matters of religion and were it not also that in some strata of the population there was a deep current of discontent due to economic conditions. That was especially true of Germany, where the lower nobility had been greatly impoverished in the course of the fifteenth century. It is also to be noted that German soldiers who had served in the Hussite wars had spread among the peasants of Silesia, Franconia, Saxony, the communistic ideas of the Taborites. and Luther's appeals to revolt against authority in the name of religion found a ready response on the part of these revolutionary elements.

The Beginnings. The crisis came in 1517 over the preaching of an indulgence which had been issued by Pope Leo X under the usual conditions of penance and contrition, to which had been added the condition of contributing, according to one's means, towards the erection of the new St. Peter's in Rome. The Archbishop of Mainz, Albrecht of Brandenburg,

who in this matter was the Pope's representative in Germany,

Economic causes of discontent.

¹ The extreme party among the Hussites, they rejected all reconciliation with the Pope and the Emperor. The Hussites used to assemble on hill-tops, to which they gave biblical names. The Taborites (Tabor) derived their name from this custom.

entrusted the preaching of the indulgence to the Dominican John Tetzel who was a good preacher and a worthy priest, but was led into serious rhetorical indiscretions by his desire to secure financial successes for his mission. When he came to preach in the neighborhood of Wittenberg, in the electorate of Saxony, his doctrines were challenged by an Augustinian friar who was then a professor at the University of Wittenberg.

Martin Luther (1483-1546) had entered the Augustinian Order at the age of twenty-two while a student at the University of Erfurt, after an accident which had aroused his anxiety concerning his salvation. In 1507 he was promoted to the priesthood and for many years was looked upon as a good, edifying, though somewhat scrupulous religious. He was worried by doubts concerning the forgiveness of his sins, but instead of listening to the advice of his confessors and supe-



Martin Luther.

riors, he endeavored to settle his troubles through his own reasoning, and he gradually developed a new doctrine entirely at variance with the teaching of the Church. According to Luther, human nature has been corrupted by the sin of Adam, beyond all hope of recovery; human acts, issuing as they do from a corrupted source, can only be bad; man ever remains a sinner; good works and penance are of no avail for our salvation; justification is possible only through strong faith, a blind trust on the part of man in the infinite merits of Christ which cover

man's sins and conceal them, as it were, from the eye of God. Luther had thought out his "New Gospel" as early as 1515 and had begun to preach it in pulpit and lecture-room. When Tetzel came to preach the indulgence, with its insistence on the meritoriousness of good works, in the neighborhood of Wittenberg and people flocked to him, Luther began to inveigh against him in his lectures and sermons1 and on the eve of All Saints' day (October 31, 1517), in true university fashion, he posted on the main door of the Church a set of 95 theses with which he challenged all-comers. Most of the theses attacked the doctrine of indulgence² and the remission of sins, and they created a sensation far beyond Luther's own expectations. Within a short time they were the talk of all Germany and gave rise to a lively literary warfare. Various attempts at reconciliation were made, but without avail. A public disputation, which was held in Leipzig two years later between Dr. Eck on the one hand and Dr. Carlstadt and Luther on the other, had no better results. Luther's defeat served only to exasperate his pride and make the breach final. He had first appealed to the Pope from the decisions of his representative in Germany; later he appealed from the ill-informed Pope to a better-informed one, next from the decisions of any Pope to a General Council, next from Council to the Bible and when shown that his teachings were in glaring contradiction to repeated passages of the Bible, he declared himself sole judge of the interpretation of Holy Writ and proceeded to demolish what remained of the Church's doctrine and organization. He rejected the Sacraments and the Sacrifice of the Mass, the jurisdiction of the Pope and bishops, the priesthood and the religious vows, and called upon the princes and nobility to

The breach

² For an authoritative treatment of this doctrine, see Cath. Encyc.,

art., "Indulgence."

¹ Doctrinal considerations were not, it seems, the only motives of Luther's zeal in the matter. The university of Wittenberg, to which he belonged, was depending for its support on the alms of the neighboring population. When the faculty saw the people flock in large numbers to Tetzel's sermons they began to fear that their source of income might be seriously impaired.

seize the Church property and secularize it. At last, in 1520, Pope Leo X solemnly condemned forty-one of Luther's propositions and formally excommunicated him. Counting upon the protection of his own Prince, the Elector of Saxony, and the assistance of his supporters, both in the laity and the clergy, Luther retaliated by scurrilous attacks against the Papacy and by burning a copy of the Bull of excommunication together with a copy of the Canon Law before the Elster Gate at Wittenberg. Thus was sealed the final break with the Church. In 1521, provided with a safe conduct, he appeared before the Diet of Worms which had been summoned to devise means for a religious peace in the Empire. Since the highest ecclesiastical authority had already pronounced on Luther's doctrines, the young Emperor Charles V consistently refused to hold a regular trial, but consented to give Luther another opportunity to retract and make his submission to the Church. Luther, however, obstinately refused to retract anything he had written. Thereupon, the Emperor issued the famous decree of Worms which placed Luther under the ban of the Empire, ordered his books to be burned and forbade all Germans to profess his doctrine. The edict, however, remained a dead letter in many German States. On leaving the Diet, Luther had been spirited away by his friends and brought to the castle of Wartburg, the "Patmos" of the new "evangelist," where he began to translate the Bible into German² and carried on, through pamphlets, a campaign of vituperation against Pope, bishops and all princes who closed their countries to the "new gospel."

Luther's appeal to the worst human passions was not long

¹ The island where St. John the Evangelist, according to tradition, was banished after he had been tortured in Rome. (See Fouard, C., St. John.)

² There had been made many German translations of the Bible before Luther's time; his, however, is generally recognized as more genuinely German than the preceding. His remarkable mastery of the language greatly contributed to fix and generalize it and it explains much of his success among the masses. (See Cath. Encyc., art., Versions of the Bible.)

and its first consequences.

in bearing its fruit. Serious disturbances broke out in several places, while the lower nobility of the Empire banded together in large numbers under the robber-Knight, Francis of Sickingen, and the dissolute Ulric of Hutten "to make an opening for the gospel" of Luther. Their plan was, first, to get rid of the spiritual princes of Germany, and that accomplished, to attack the secular princes. They were defeated by a confederation of the Rhenish princes, but the revolt was hardly suppressed when a far more serious one took place. The peasants, drawing their own conclusions from the preaching of Luther, arose everywhere in revolt. Allying themselves with the rabble of cities and the scattered followers of Sickingen, they formed "evangelical brotherhoods" which set up socialistic communities and committed all kinds of horrors. When the rising was finally put down, hundreds of castles and monasteries lay in ashes; schools and churches were broken up; hundreds of villages were burnt and it has been estimated that between one hundred thousand and one hundred and fifty thousand had been slain. At the beginning of the rebellion, Luther's sympathy was on the side of the peasants, but when he saw that it would be crushed, he turned savagely against them, urging on the princes in their work of pitiless repression. The net political result of the defeat of the peasants and lower nobility was to leave practically unchecked the power of the princes; to them the reformers now turned for support, leaving in their hands the regulation of all Church questions and preaching the doctrine of passive obedience to the temporal rulers. It was to this union with the secular princes that Protestantism owed its firm establishment in Germany.

Spread of the Revolt on the Continent. At the time Luther was preaching his "gospel" in Germany, Ulrich Zwingli, a priest of the minster of Zurich, was founding a new religious system which was very similar to that of the Saxon friar. Zurich and a few other cantons adopted this new system and tried to force it upon the cantons which had remained faithful

Ulrich Zwingli to the Church. The issue was decisively fought out at Cappel where the forces of Zurich and its confederates were routed by the Catholics. Zurich had to dissolve its league, but each canton was left free in the administration of its own internal affairs. Zwingli's system later fused with Calvin's. Luther-



ZWINGLI

anism was forced upon the people of Sweden, Denmark and its dependencies by their rulers, who appropriated to the Crown the jurisdiction of the Church and divided her property with the nobility. As early as 1525 Albrecht of Brandenburg, Grand Master of the Teutonic Order, had forcibly introduced the Reformation into the possessions of the Order on the Baltic; thence, as also from Saxonv and Bohemia, the movement spread to Poland, Hungary and Transylvania.

In Poland, however, its progress was checked by the zeal of the bishops and the missionaries, especially the Jesuits. Westward the Reformation spread to the Netherlands, France and the British Isles, but there it assumed new forms: Calvinism and Anglicanism.

Calvinism, the most radical form of Protestantism, owes its name to John Calvin, a Frenchman and scholar of no mean ability, who had fled from France in order to escape a trial for heresy and had settled in Geneva, where he founded an John Calvin. academy through the influence of which his doctrines gradually supplanted Zwinglianism in the Swiss cantons. Calvin's

system is expounded in his compendium of the Christian religion (Institutio Religionis Christianæ).¹ Its chief characteristics are the doctrine of absolute predestination and the simplicity of Church ritual and organization. According to Calvin, some men are created to enjoy everlasting happiness and others to suffer everlasting misery without any reference to their merits. The whole ceremonial of Divine Worship is practically abolished. Each Calvinistic community is a sort of little republic with three grades of church officials appointed through popular election: pastors, deacons and elders. The only bond of union between the different communities is the synod. From Geneva and with but slight variations, Calvinism spread under different names into France, Germany, the Netherlands, Hungary, Scotland and England whence it was imported into the American New England colonies.²

The English Schism. The separation of England from Catholic unity remained for a long time shrouded in mists which had been woven around it by partisan spirit and were dispelled in comparatively recent times by the researches of Catholic and Protestant historians. The English schism was not due to any ill feeling towards the Holy See, nor to abuses and corruption within the Church, nor to ignorance of their religion among the population, nor to the preaching in England of the new doctrines, nor in any appreciable degree to the influence of the Renaissance and the remnants of past heresies. Friction there had been in England between Church and State on the eve of the Reformation, but this friction was not greater than at any other period in the history of the country. As late as 1520, on the occasion of the presentation to Leo X of Henry VIII's work against Luther, England, through her king, pro-

¹ In addition to these "Institutes" Calvin published a "Catechism" for elementary religious instruction. Both were extensively used and went through many editions in several languages.

³ The Calvinists were known as Huguenots in France, Presbyterians in Scotland, the Dutch Reformed Church in Holland, Puritans in England and the American Colonies.

tested her devotion and veneration towards the Holy See. There was, in England as elsewhere, need of reforms among the clergy, but the condition of the Church was far from being as dark as commonly presented. Says Brewer: "That in so large a body of men [as the religious in England] discredit-



HENRY VIII

able members were to be found is likely enough, but that corruption was so black or so general as party spirit would have us believe is contrary to all analogy and is unsupported by impartial and contemporary evidence."1 As to the instruction of the people, unmistakable evidence of its being well taken care of is found in the works published by the English press at the end of the fifteenth century. Most of these publications were of a religious character: primers,

lives of the Saints, expositions of the Creed and the Commandments, evidently intended for the instruction of the masses. Their distribution was encouraged by the clergy and they were in general demand. Nor can we ascribe the foundation of the Anglican Church to Lollardism or the Renaissance. There were still some secret adherents of Wyclif scattered through the land, but Lollardism had ceased to be a real menace since the middle of the fifteenth century. The English Renaissance had been

¹ Brewer, L., Henry VIII, V. 2, p. 50.

most conservative in character and it had taken place in union with the Church. Bl. Thomas More, the leading English humanist, was a devout Catholic, while Archbishop Warham, Bishop Fisher, Bishop Langton and Dean Colet, all ardent supporters of the revival, were thorough and practical churchmen.

The English schism was the work of Henry VIII.

The separation of England from Catholic unity was the work of her king, Henry VIII, who in this matter was remarkably served by the country's circumstances. The wars of the Roses had left England in a condition where the king could impose his own will without fear of serious opposition. The old aristocracy had been practically wiped out by the wars; the new nobility were entirely dependent upon the king's good will and all too ready to further his plans of spoliation in order to better their own condition, while the people still had very vivid recollections of the horrors of the civil war and were disposed to make any concession for the sake of public peace. Henry VIII had been destined for the Church in his early youth and had received a good humanistic and theological education of which he gave remarkable evidence in his treatise on the seven Sacraments against Luther. It was for this work that Leo X conferred upon him the title "Defensor Fidei" (Defender of the Faith) which, strange though it may seem, the English kings have retained to this day. Being called to the throne by the death of his elder brother, Henry married the latter's widow, Catherine of Aragon, and their union seems to have been a happy one until about 1514 when there began a period of open marital infidelities culminating in the king's infatuation for Ann Boleyn. The ecclesiastical impediment to Henry's marriage with his brother's widow had been removed by a special dispensation, but now the king began to feign scruples concerning the validity of the dispensation and he tried by all means in his power to obtain from the Holy See a declaration of nullity of the marriage. All the Pope could grant, however, was the appointment of a commission, including Cardinal Wolsey, the king's favorite, to examine the case and report its findings to Rome. Henry's efforts in this direction, however, all came to naught and he finally threw off allegiance to the Pope. He appointed to the see of Canterbury one of his creatures. Thomas Cranmer, who immediately granted the desired divorce. Catherine and her daughter, Mary, were at once banished from the court and Ann Boleyn was crowned queen. In 1534 a servile Parliament passed the Act of Supremacy which declared that "the king, our sovereign lord, his heirs and successors, kings of this realm, shall be taken and accepted and reputed the only supreme head on this earth of the Church of England called Anglicana Ecclesia." Except for this rejection of the Roman supremacy, England in Henry's reign was, in the main, still Catholic; changes in the dogma and ritual took place only later in the reigns of Edward VI and Elizabeth.

The Immediate Results of the Revolt. Luther's rebellion ushered in a period of religious wars which lasted over a century and were waged with greatest intensity in France and Germany, though no country entirely escaped their ravages. The Diet of Worms was followed by others which were summoned in order to enforce or modify its decisions. It was in one of these diets, that of Speyer in 1529, that the Lutheran princes received the name of Protestants, because they protested against the decisions of the Catholic majority. By allying themselves with the enemies of the Empire, French, English and even the Turks, the Protestants frustrated all the attempts of Charles V to restore a semblance of religious unity in Germany. A religious peace, the so-called Peace of Augs-Results in burg, was finally declared in 1555. It was founded on the principle: "cujus regio illius religio" (the ruler's religion is to be that of his subjects), in other words the prince was to determine the faith of his subjects. This peace, however, proved to be no peace at all; its clauses were constantly set at defiance in the next two generations and in 1618 a war broke out in which Germany. Denmark, Holland, England, Sweden, France and Spain were deeply involved and which was carried on for thirty years

with an extreme ferocity. When it was brought to a close by the Peace of Westphalia, Germany was a ruin. She had lost three-fourths of her peasant population in war or by pestilence and misery; thousands of her villages and towns had been reduced to ashes; immense tracts of land which had been tilled for centuries were now turned into a wilderness and her commerce had been swept away. Not until the middle of the nineteenth century did Germany regain anything like the prosperity which she had enjoyed in the beginning of the sixteenth. In the Netherlands, a Spanish dependency since the beginning of the sixteenth century, the religious question was seized upon, as a weapon against Spain, by the ambitious, unscrupulous William the Silent, and his following of beggarly, greedy nobles. The revolution which their machinations had engineered lasted for a quarter of a century and brought in its trail untold misery for the southern provinces which had been the main battlefield of the contending parties. The northern or United Provinces abjured their allegiance to Spain and worked out a republican form of government. In France, between 1555 and 1563, the Huguenots, as the Calvinists were known, organized more than two thousand communities; they formed alliances with Elizabeth of England and the Protestant Princes of Germany, levied men and contributions and organized military bodies. Though these Huguenots formed but a small minority of the population, they wielded great influence at the court on account of the large number of the higher nobility who sided with them for purely political purposes. The Catholics, who formed the overwhelming majority of the population, feeling that they were being sacrificed to a handful of rebels, organized in their turn and there followed a series of eight bloody wars which wrought frightful devastation in the country. The Edict of Nantes (1598), which granted freedom of conscience and, within certain limits, freedom of worship to the Calvinists, put an end to the conflict for the time; it could not, however, ensure a lasting peace because it allowed the Calvinists to retain their places of safety and thus form a state within the State.

the Netherlands,

France

The British Isles had their own civil wars in which religion and the was one of the strong motives and for two centuries they wit- British Isles. nessed a savage persecution of Catholics which at times extended to all non-conforming Protestants.

The "Reformers" had raised the standard of revolt in the name of "the liberty of conscience and worship." Of this liberty there certainly was very little in the three centuries which followed Luther's apostasy. In every country the rulers determined the faith of the masses as they saw fit and the school became in this matter the humble servant of the State.

QUESTIONS FOR DISCUSSION

- 1. Of the causes of the Reformation, which, according to you, were the most potent?
- 2. What were the effects of the Black Death upon the schools of the fourteenth century?
- 3. Compare the development and results of the Reformation in England with its development and results in any continental country.
- 4. Compare Calvin's and Luther's influence on the Reformation move-
- 5. What part of the property confiscated by the Reformers was used for educational purposes?
- 6. To what extent was Luther actuated by doctrinal considerations in his attacks upon the indulgences?
- 7. What traces of the tendency towards nationalism in ecclesiastical and educational matters are discoverable in fifteenth century France, England or Germany?
- 8. Account for the fact that the Protestant revolt made such rapid headway in Germany.
- 9. Account for the fact that Calvinism soon supplanted Zwinglianism in Switzerland.
- 10. What was likely to be the effect upon education of the wholesale confiscation of Church property by the Protestant princes?

REFERENCES

See bibliography appended to Chapter V, especially Döllinger and Janssen.

CHAPTER V

EDUCATIONAL RESULTS OF THE REFORMATION



ESTERN Schools on the Eve of the Reformation. Before considering the influence of the Reformation upon education, it will not be amiss to make a brief survey of the western school system, in order to determine what benefits, if any, accrued to it from the Protestant revolt. At

the close of the fourteenth century, there were, in the West, forty-five universities; thirty-five were founded in the fifteenth and five more at the beginning of the sixteenth, immediately before Luther's rebellion; a total of eighty-five higher institutions of learning scattered all through the West. Italy had twenty, France eighteen, Spain and Portugal eighteen, Germany fifteen, the British Isles five, Hungary three, Scandinavia two, the Low Countries, Switzerland, Bohemia and Poland, one each. Some of the universities, like Paris, Oxford, Bologna, Prague, Cologne, enrolled thousands of students; many of them had at least six hundred; taking the last number as an average, a very moderate estimate, we reach a grand total of some fifty thousand young men preparing for admission into the intellectual nobility of the times, a very respectable showing, if we consider that the population of Western Europe was then probably much less than one-eighth what it is at present.¹ At the beginning of the fifteenth century, the organization of the universities was still substantially what it had been in the fourteenth,2 but under the influence of the Renaissance a few

Eighty-five universities

¹ According to a census made during Elizabeth's reign there were at that time something like four million people in England. That country's population is to-day a little in excess of thirty-five million.

² See Vol. I, ch. IX,

changes had taken place in their work. Linguistic and literary studies had gained a firm footing in the faculty of arts. Greek and, in many places, Hebrew, had been added to the curriculum; classical Latin had taken the place of mediæval Latin, and the study of the ancient languages, as also that of history, was decidedly more critical than it had been in the Middle Ages. As we have seen in Chapters II and III, the Italian universities, particularly Pavia, Florence, Padua and Rome, had been the first home of this new learning; but it soon spread to other countries. Chairs of Rhetoric and Humanities, as the new learning was called, were to be found in most universities at the beginning of the fifteenth century; in some, there had been founded a new college, entirely devoted to the comparative study of the classical languages; such was the Collegium Trilingue (College of the Three Languages) of Louvain and Alcala for the study of Latin, Greek and Hebrew.

What we now call secondary education was provided for in and hundreds various institutions which may be included under the generic of secondary name of grammar schools. Some were cathedral schools, some monastic schools, some were attached to a collegiate or even a parish church; others were supported by the municipality of the town, others still, like Winchester and Eton, were depending upon a private endowment. The schools of the Brethren of the Common Life and those which were founded during the Renaissance, like the Italian Court Schools and the German Fürstenschulen, also belong to this type. The scope of the work of these grammar schools varied, at times greatly, from one institution to the other. In many, only the elements of a classical education were taught, while many others had a much wider course of studies; there were even cases in which the equivalent of a whole university arts course was taught. Most of these grammar schools had been founded long before the sixteenth century. Says Leach of these institutions in England: "Grammar Schools, instead of being comparatively modern. post-Reformation inventions, are among our most ancient institutions, some of them far older than the Lord Mayor of

London or the House of Commons." The same authority has computed that, prior to Henry VIII's confiscations, there were in England not less than three hundred grammar schools or one for every 8,300 people. "In the Poll-tax returns of 1377, forty-two towns are given. . . . They had a total population of 166,000 with the possible exception of Dartmouth, with its 949 people, every one of these towns had its Grammar School. . . . As regards the numbers attending these schools, wherever numbers are mentioned, they are surprising for their magnitude." And England was no exception in this matter.

The facilities for an elementary education were common. The mass of documentary evidence which has been brought to light in the last fifty years has also shown that on the eve of the Reformation the facilities for an elementary education were extremely common. There were thousands of elementary schools scattered all through Europe under various names: parish schools, monastic schools, chantry schools, song schools, gild schools, town schools, venture schools.³

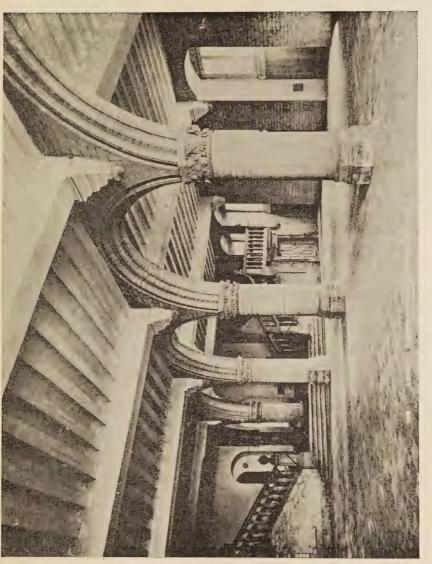
"Even in country parishes the Canon law required that the parish clerk should be able to teach the boys to read as well as to sing their Psalter. How far such regulations were actually carried out, it is, of course, impossible to determine with precision. But it may be stated with some confidence that at least in the later Middle Ages the smallest towns and even the larger villages possessed schools where a boy might learn to read and acquire the first rudiments of ecclesiastical Latin; while, except in very remote and thinly-populated regions he would never have had to go very far from home to find a regular Grammar School. That the means of education in reading, writing and the elements of Latin were far more widely diffused in mediæval times than has sometimes been supposed, is coming to be generally recognized by students of mediæval life. The knowledge of reading and writing and of the elements of Latin was by no means confined to the clergy: 'the bailiff of every manor kept his accounts in Latin.' A Grammar Master often formed part of the establishment of a great noble or prelate, who had pages of gentle family residing in his house for education. In other cases a boy of a well-to-do family no doubt received his earliest education from a chaplain or 'clerk' of his father or from a private tutor or neighboring priest engaged for the purpose." 4

¹ Leach, A. F., English Schools at the Reformation, p. 5.

³ Ibid., p. 100.

⁸ See Vol. I, chapter VI.

⁴ Rashdall, H., Universities of Europe in the Middle Ages, Vol. II, Part 2, p. 601.



SIXTEENTH CENTURY STAIRCASE, UNIVERSITY OF LOUVAIN

Though education was non-compulsory, the records which have been preserved show that the schools were well attended. Formerly, all these schools were Latin schools; the language taught and used in the class-room was Latin. Of late, many of the gild and town schools had become semi- or entirely vernacular schools, and had taken up the teaching of business arithmetic in order to meet local commercial needs. Special schools to train writers, or to prepare young men to handle accounts, were also founded; the teaching of reading was sometimes added to the specialty of such schools.² In all schools moral and religious instruction, and in many, singing, were an integral part of the curriculum. The school, however, was but incidental in the education of the masses. Theirs was essentially a practical training, received in the home, on the farm, or in the shop, everywhere vivified and spiritualized by religion, and in no way inferior to the education of the modern laborer.

Other educational agencies.

"Culturally, the mediæval craftsman was immeasurably superior to the average workman of to-day. Education is of the whole man, and such an education the mediæval craftsman enjoyed in his religion and his churches, as well as in his gild and his craft. The most striking and obvious fact of these ages, is 'the universality of the feeling and appreciation for beauty.' Beauty dwelt with men and walked with them and found expression at their touch. The things of the spirit were then shared by all and expressed by all. 'Those prayers in stone, which are so marvelous in the eyes of posterity, were not built by highly-paid specialists, but by the common people themselves, who enriched their handiwork with a thousand blossoms of their quaint and untutored imagination.' Such was the perfection of democratic industry, its flower, and glory, and joy." *

Immediate Results of the Protestant Revolt. On the eve of Luther's rebellion, the vast majority of schools of all grades were supported from Church funds. One of the first measures

¹ See Janssen, J., History of the German People, Vol. I, pp. 25-60.

² In the late Middle Ages writing developed into a profession and so it remained for a long time afterwards. Careful training in writing was a necessity for all kinds of secretaries and city clerks. In some places, as in Paris, writing masters were organized into a gild, enjoying an official monopoly of the teaching of writing. Business reckoning and its teaching similarly developed in commercial towns in connection with the development of trade.

⁸ Husslein, J., Democratic Industry, p. 298.

of the reformers everywhere was the suppression of churches, monasteries, religious associations, foundations, and the confiscation of their property. In England alone, between the years In England: 1536 and 1546, there were suppressed "600 monasteries, 90 colleges, 2,300 free chapels, and 100 hospitals." Henry VIII "thereby secured an annual income of 150,000 pounds. About one-half of the plunder thus secured. Henry spent upon coast defenses and a new navy, and much of the remainder he distributed among his favorites and supporters. Very little of this money was spent for education, higher or secondary, to atone for the wholesale destruction of schools and colleges he destruction had wrought. The effect upon education of the reign of his of schools successor, Edward VI (1547-1553) was very similar."2 With this ruthless suppression of colleges and monasteries went the destruction of their libraries. "The costliest manuscripts and books were sold to grocers and soap-sellers for a few pence. libraries; One merchant bought the contents of two noble libraries for forty shillings. Of a quarter of a million of illuminated missals and other books of the rarest workmanship, only a very few copies have been saved from the ruins."3 The effect of the wholesale looting of churches and monasteries was felt immediately. Of the hundreds of schools which had come down from the Middle Ages very few remained open. Contemporary writers bitterly complain of the deterioration in learning and education. Not until the end of the seventeenth century had the secondary schools recovered from the blow they had received in the early sixteenth, and as late as 1865, there was not in England any provision for elementary education comparable to what it had been before the reign of Henry VIII. The universities of Oxford and Cambridge were Oxford and affected no less deeply by the act of suppression. Many of the Cambridge;

¹ Gasquet, F. A., Henry VIII and the English Monasteries, Vol. II,

² Graves, F. P., A History of Education, Vol. II, p. 195.

⁸ Guggenberger, A., General History of the Christian Era, Vol. II, p. 200. See also Gasquet, F. A., Henry VIII and the English Monasteries, Vol. II, p. 423, and The Eve of the Reformation, p. 41, and foll.

scholars at these universities were supported by the monasteries and convents. In 1535 the number of degrees granted at Oxford was 108. In 1536, a year after the operations had begun against the monasteries, the number had fallen to 44. From 1536 to 1548 the average was less than 57 and from 1548 to 1553 it fell to 33. Cambridge suffered no less than Oxford.¹ But the consequences of the suppression did not stop there; they reached far into the domain of economics. It has been computed that, as a result of the suppression of monasteries by Henry VIII, "in round numbers, eight thousand religious persons were expelled from their houses beside probably more than ten times that number who were their dependents or otherwise obtained livings in their service."2 Very little, by way of compensation, came to the religious who were thus ejected; most of them received nothing, but the blow fell most heavily on the masses.

disastrous economic consequences; "The splendid hospitality of the monks was never practiced by the new owners. The easy rents taken by the monasteries were changed into rack-rents. The common lands, pasturages and arable plots, of which the cottager had enjoyed the use under the crosier, were taken in and enclosed by the new landlords. By this practice, says a contemporary, the poor cottagers that always before might have 'kept a cow for sustaining himself, his wife and children, and twenty sheep towards their clothing, now is not able to keep so much as a goose or a hen.' The suppression made the new men rich and the poor 'stark beggars.' Pauperism took the place of honored poverty. To Henry VIII belongs the unenviable distinction of having introduced a 'pauper dress' and vulgarized the whole people, when he ordered the poor men, who had been heretofore supported by the monks of Glastonbury, to wear a badge on their hats and cloaks as the recipients of nineteen pence a week from the royal munificence. 'Not only were the channels through which all relief flowed to the people destroyed, but the very fountain head of the accumulated charity of previous generations was dried up at its source when the property of the religious houses was swept into the capacious purse of Henry.'"

¹ See Gasquet, F. A., Henry VIII and the English Monasteries, Vol. II, pp. 423 and foll.

² Gasquet, F. A., Henry VIII and the English Monasteries, Vol. II, p. 323.

³ Guggenberger, A., A History of the Christian Era, Vol. II, pp. 200 and foll. The immediate consequences of this wholesale spoliation are thus forcefully described by a modern writer: "Alms-houses in which old men and women were fed and clothed were robbed

The confiscation of gild property devoted to works of charity, which took place in the reign of Edward VI,1 completed the robbery of the poor begun under Henry VIII and prepared the way for the Poor Law Reforms of the second half of the sixteenth century, culminating, in 1601, in the Act for the Relief of the Poor, which was passed by Parliament:

"For setting to work the Children of all such Parents who shall not be thought able to keep and maintain their Children; and pauperism. also for setting to work all such Persons, married or unmarried, having no Means to maintain them, and use no ordinary and daily Trade of Life to get their Living by: And also to raise weekly or otherwise (by Taxation in such competent Sum and Sums of Money, as they [the churchwardens] shall think fit) a convenient Stock of Flax, Hemp, Wool, Thread, Iron and other necessary Wear and Stuff. to set the Poor on work, and also competent Sums of Money for and towards the necessary Relief of the Lame, Impotent, Old, Blind and such other among them, being poor and not able to work, and also for the putting out of such Children to be Apprentices, to be gathered out of the same Parish, according to the ability of the same Parish and to do and execute all other Things, as well for the disposal of the said Stock as otherwise concerning the premises, as to them shall seem convenient."

The same "deterioration of learning," the same lowering of the moral and economic condition of the masses everywhere

to the last pound, the poor alms-folk being turned out into the cold at an hour's warning to beg their bread. Hospitals for the sick and needy, sometimes magnificently provided with nurses and chaplains, whose very raison d'être was that they were to look after and care for those who were past caring for themselves these were stript of all their belongings, the inmates sent out to hobble into some convenient dry ditch to lie down and die in, or to crawl into some barn or hovel, there to be tended - not without fear of consequences - by some kindly man or woman, who could not bear to see a suffering fellow-creature drop down and die at their own doorposts."—Dr. Jessopp, The Great Pillage, quoted by Husslein, J., Democratic Industry.

"It was formerly supposed that this latter monarch used the income which he secured from the monastic and chantry foundations in the cause of education. Leach has, however, shown that 'never was a great reputation more easily gained and less deserved than that of King Edward as a founder of schools.'"—Graves, F. P., A History of Education, Vol. II, p. 195.

² For contemporary testimonies to that effect see Janssen, J., History of the German People, Vol. III, pp. 355-365, Vol. VII, pp. 11 and foll.; Döllinger, F., Die Reformation, Vol. I, pp. 418-545.

The same consequences on the Continent.

followed the breaking out of the Reformation, 1 but such was particularly the case in Germany, the land of its inception, and there none was more responsible for the sad state of affairs than the leader of the Reformation himself. The example of Luther's revolt against existing institutions, and his inflammatory pamphlets, were, in the main, responsible for the breaking out of the Peasants' War, and he had repeatedly urged upon the secular princes the confiscation of all Church property, then the chief source of school support. Some of his followers even urged parents to remove their children from school, because, forsooth, learning was useless to understand, nay, even to preach, the Gospel. The fanatic Carlstadt advised the students to leave the school and to go back to the spade and plough, because "man was to eat bread in the sweat of his brow."2 Summing up the first results of the Reformation for German education, the Protestant historian Paulsen says:

"The first effect of these events on the educational institutions was destructive; the old schools and universities were so bound up with the Church in all respects — socially, legally and economically — that they could not but be involved in its downfall. The mere cessation of the prospects of clerical livings was bound to exercise a deterrent influence in regard to school and university studies. Then followed the Peasants' War, with its unmerciful devastation on both sides; and thus it came about that the ten years between 1525 and 1535 resulted in a depression of learning and education which is without a parallel in history. The figures of attendance at the universities were reduced to one-quarter of their former amount, and the same was probably the case with the schools, so that Erasmus could exclaim: 'Wherever Luther prevails, the cause of literature and learning is lost.'" "

The Educational Ideas of Luther. Though he was not a humanist himself, either by temperament or training, Luther, in the early stage of his rebellion, had made an alliance with

¹ "Luther himself was forced sadly to admit on many an occasion that the cities of Germany which most eagerly welcomed him had changed for the worse after accepting his 'New Evangel' Catholic countries were in many cases hardly less affected by the reflex of the disastrous economic doctrines which now gained ground as the corollary to the new religious theory of individualism."—Husslein, J., Democratic Industry, pp. 299 and foll.

² See Döllinger, op. cit.

³ Paulsen, F., German Education, p. 54.

the leaders of radical humanism. Like them, he was in open revolt against the existing order of things; like them, at that time at least, he strongly upheld the supremacy of natural reason. "What there is contrary to reason is certainly much more contrary to God. For how should not that be against Divine truth which is against reason and human truth?" That the leader of a religious reform should have formed an alliance with the enemies of all religion is "a strange phenomenon" indeed, but it is stranger still that the humanists should offer their assistance to Luther against the Papacy, the most generous patron of arts and letters.

As we have seen in a previous section of this chapter, the humanists had little cause for rejoicing over their alliance with the "Gospellers"; even Luther turned against the universities. "The Moloch to which the Jews offered up their children, are the higher schools, in which the best part of youth is sacrificed as a burnt offering. There they are instructed in false heathen art and godless human knowledge: this is the fire of Moloch, which no one can weep over enough, through which the most pious and most clever boys are miserably ruined."2 Reason, which, in the beginning, he had extolled, he now fiercely attacked. Reason is "the devil's bride," "sheer darkness," "the more subtle the more poisonous a beast."3 Luther, however, was well aware of the importance of the school for the success of his religious system. When he saw the appalling results of his own declamations and those of his co-preachers, he began, in his characteristic fashion, to remonstrate with people and princes against their indifference to the education of the rising generation. His sermons, addresses and letters contain many references to education, but his ideas on the subject are, in the main, set forth in his Letter to the Mayors and Aldermen of All Cities of Germany in Behalf of

¹ The term is Erasmus'.

² See Döllinger, F., Die Reformation, Vol. I, pp. 475 and foll.; Janssen, J., History of the German People, Vol. II, pp. 211-213.

Döllinger, op. cit., Vol. I, pp. 477 and foll.

Christian Education, which was written in 1524, and in his Sermon on the Duty of Sending Children to School, which appeared in 1530. The Letter is generally considered the first Reformation document on education.

The aim of education, both civic and religious;

The aim of education, Luther holds, is not only religious, but civic. "For it is a great and solemn duty that is laid upon us, a duty of immense moment to Christ and to the world to give aid and council to the young. And in so doing we likewise promote our own best interests."

compulsory elementary education; Education should be organized by the State and be compulsory in at least the elementary stage.

"I hold it to be incumbent on those in authority to command their subjects to keep their children at school; for it is, beyond doubt, their duty to insure the permanence of the above-named offices and positions, so that preachers, jurists, curates, scribes, physicians, school-masters, and the like, may not fail from among us; for we cannot do without them. If they have the right to command their subjects, the able-bodied among them, in time of war to handle musket and pike, to mount the walls, or to do whatever else the exigencies may require; with how much the more reason ought they to compel the people to keep their children at schools"

School and home preparation for life should be correlated; there should be not only academic but industrial training as well.

"But, you say, 'we cannot bring all our children up to be students; we cannot spare them; we need them at home to work for us.'... I ask no more than this, namely, that boys shall attend upon such schools as I have in view, an hour or two a day and none the less spend the rest of their time at home, or in learning some trade, or doing whatever else you will; thus both these matters will be cared for together while they are young and opportunities are favorable..... So, too, your little girls may easily find time enough to go to school an hour a day, and yet do all their household duties...."

Luther exalts the position of the teacher.

"I tell you, in a word, that a diligent, devoted school teacher, preceptor, or any person, no matter what his title, who faithfully trains and teaches boys, can never receive an adequate reward, and no money is sufficient to pay the debt you owe him; so, too, said the pagan

¹ See Barnard's American Journal of Education, Vol. IV, pp. 429 and foll.

² Ibid.

Aristotle For my part, if I were or were compelled to leave off preaching and to enter some other vocation, I know not an office that would please me better than that of schoolmaster, or teacher of boys."

The vernacular is to be the language of the elementary the vernacular schools, the Bible and catechism the chief subjects of study, to be the language of but Luther also recommends singing, gymnastics and he insists the elementary on the retention of the humanistic curriculum, "So that preachers, jurists, curates, scribes, physicians, schoolmasters and the like may not fail from among us."

On the whole, Luther's views on education contain two original contributions: his suggestion that elementary education be made compulsory and his other suggestion that the school be supported, and as a corollary, controlled by the State. Whether or not he realized the full portent of these suggestions is a debatable question, but it seems certain that they occurred to him as the only remedy to a sad state of affairs for which he was, in the main, responsible. The change of the elementary school from a Latin into a vernacular school is also to be traced, partly at least, 1 to Luther's influence. The use of the vernacular in the elementary schools was a natural consequence of the main tenet of Luther's gospel: that the Bible is the only authority in matters of religion, and that through it each individual is to work out his own salvation. Since there could be no question of the masses reading the Greek or Latin Bible, they must, of necessity, be taught to read it in their own tongue. It was to that end, as also to spread his own interpretation of the Scriptures, that Luther prepared a German translation of the Bible. This German Bible, together with his "Catechisms," his "Sermons," and "Hymns," far more than any views of his concerning educa-

¹ We have seen that, before Luther's time, vernacular schools had been founded in response to the needs of commercial cities. With the growth of these needs and the rise of national literatures there developed a new class of people desirous to go to school in order to learn how to read not Latin but the language they spoke. The study of Latin was left to those wishing to prepare for the professions and was gradually eliminated from the elementary school.

tion, were the sources of Luther's influence on his own and following generations.

Bugenhagen,

The Co-Workers of Luther. The reorganization of the German schools was chiefly the work of two colleagues of Luther at the University of Wittenberg: Johann Bugenhagen (1485-1558) and Philipp Melanchton (1497-1560). The first of these two men, sometimes called Pomeranus or Dr. Pommer, from his native Pomerania, was a pastor and a professor at Wittenberg, and more than any other man he was responsible for the reorganization of churches and schools in the north of Germany, according to Lutheran ideas. His Kirschen und Schule Ordnungen (Church and School Plans) for Pomerania, Brunswick, Hamburg and other places became models for many towns and cities in the north of Germany. Bugenhagen also was the pioneer of the work of reorganization in Denmark. Sweden did not take it up in earnest before the end of the seventeenth century.

Melanchton.

Mention has already been made of Melanchton, the leading German educator of this period, and sometimes referred to as "Præceptor Germaniæ." At the age of seventeen he had won his master's degree at the University of Tübingen and been appointed an instructor in Latin classics. Four years later, in 1518, he was appointed professor of Greek at the University of Wittenberg, upon the recommendation of his great-uncle Reuchlin, who said of him on that occasion: "I know no one among the Germans who excels him, save Erasmus Rotterdamus, and he is a Hollander." At Wittenberg Melanchton was from the first one of the most popular lecturers the university had known. Through his association with Luther he became interested in theology, received his bachelor's degree in that subject and thereafter lectured on the Bible and dogmatics as well as on the classics. Of a peace-loving disposition, Melanchton always advocated moderation and sought, but in vain, a reunion of the Protestants with the Catholic Church. Though he is more commonly referred to as a theologian, his work as a humanist, a teacher and organizer of schools was no less

EFFIGIES REVERENDIVIRI, D. PHI: LIPPI MELANTHONIS, EXFRESSA PVITEBERGE, ANNO M. D. LXIIII.



MELANCHTON

important than his achievements as a reformer. Like Erasmus, he was from an early date, and he remained all through his life, an enthusiastic humanist, and he did much to introduce the humanistic studies in the universities and secondary schools of Germany. He prepared new editions of the classics and published a number of text-books on various school subjects. Many of his pupils came to occupy leading positions in Church or State or in the schools; his advice was eagerly sought by princes, churchmen and magistrates, and he did for the schools of Central and Southern Germany what Bugenhagen did for those of Northern Germany. In 1527 he was asked by the Elector to visit and report on the schools of Saxony. His Book of Visitation was made the basis of the school reorganization in that Duchy. The plan provided for the establishment of what was essentially a system of Latin schools somewhat similar to Sturm's Gymnasium at Strassburg, and preparing the future leaders of the State for entrance into universities. The schools were divided into three groups, or classes of students. Only in the first class was there any work done in the vernacular.

and other Lutheran educators.

Other Lutheran educators of note during this period were: Johann Brenz (1499-1570), the author of a widely-used catechism and of a school plan for Wurtemberg; Valentin Ickelsamer (1500-1541?), the protagonist of the vernacular in the schools; Valentin Trotzendorf (1490-1556) and Michael Neander (1525-1595), two of the most renowned of Melanchton's pupils. Trotzendorf's Latin school at Goldberg, Silesia. was famous for its honor system, much after the plan of a Roman republic, in which the officers were elected by the students, with Trotzendorf as perpetual dictator. Neander was for many years Rector of the cloistral school at Ilfeld in the Harz Mountains. His course of studies, far more liberal than the current humanistic course, included, in addition to religion and the linguistic subjects, history, geography, music and science. He published a number of text-books for the use of his own school.

Anglican Control of Education. As we saw in Chapter IV, the politico-economic character of the Reformation was in no country so evident as in England. The severance from Rome was the work of Henry VIII and his courtiers and it was made purely as a matter of expediency. Apart from the confiscation of Church property and the transfer of the religious allegiance from Pope to King, the most important alteration at this stage was the changing of the service from Latin to English. Before his break with Rome, Henry VIII had prohibited the use of Tyndale's version of the New Testament. In 1537 an English translation of the Bible containing the same version of the New Testament was ordered to be made accessible to everybody. The King, "though maintaining that he was not compelled by God's word to set forth the Scriptures in English, yet of his own liberality and goodness. was and is pleased that his said loving subjects should have and read the same in convenient places and times." In 1543 a royal decree withdrew the Bible and prescribed another book. the "King's Book," for the instruction of the bulk of the nation. All laymen were forbidden to read the Bible in public; the nobility could peruse it privately; of the lower classes only the householders enjoyed the same privilege; their wives. children, employees were forbidden to read any part of the Bible. Serious doctrinal changes took place when the English Prayer-book, Psalter, and Catechism were put into use, but Anglicanism received its final form only in the reign of Elizabeth (1558-1602). The Forty-two Articles of Religion composed in the reign of Edward VI (1547-1553) were revised and reduced to the Thirty-nine Articles, which have remained the norm of the Anglican religious creed. The externals of worship practically remained as Henry VIII had left them; the ecclesiastical supremacy of the head of the State was recognized (Oath of Supremacy), and the Established Church succeeded the Catholic Church in the control of education, supervising instruction, licensing teachers and taking their oath of

¹ Procter and Frere, History of the Book of Common Prayer, p. 30.

The Established Church controlled English schools. allegiance. Strict conformity to the teachings and practices of the Established Church was insisted upon; any teacher who was suspected of being unsound in the faith was deprived of his position. In order to make conformity still more effective, a series of laws were enacted culminating in the famous "Act of Conformity" (1662) and the "Five Mile Act" (1665), the first requiring all schoolmasters to subscribe to a declaration of conformity to the liturgy of the Church and the second forbidding all Dissenters to teach in any school of the realm.¹

Calvin's Influence on Education, Like Luther, Calvin was primarily a religious reformer, very much engrossed in the theological disputes of the times, but he was, also, and to a far greater degree than his Saxon contemporary, a scholar, a man of letters and an organizer of schools. His Institutes show his complete familiarity with the Sacred text and the classics, and a remarkable knowledge of Hebrew besides. Its latinity has



been compared to that of Erasmus and the French translation has been pronounced one of the early masterpieces of

¹ These penal laws were relaxed for Protestants shortly after the revolution of 1688, for Catholics at the close of the eighteenth century. Until that time, the latter had to resort to the Continent for their education. It was for that purpose that a number of Irish schools and colleges were established in Catholic university centers, and the English Colleges at Douai, Rome, Valladolid and St. Omer were founded, the last named, the lineal ancestor of Stonyhurst, for the laity, whereas the other three were for the training of the clergy.

modern French; its influence on the French language has been likened to that of Luther's writings on German. No protagonist of the Reformation, not even Luther, exerted a deeper influence on the movement than Calvin.¹ During his life-time, he wielded a tremendous power through his Institutes, his Catechism, his Sermons (there are more than twenty-three hundred extant), and his vast correspondence. His Institutes became the standard of orthodox Protestant belief in hundreds Areligious of communities established by his disciples, after the pattern conception of that founded by Calvin himself at Geneva, and breathing of education. the same spirit of fierce intolerance. In the plans which he drew for the civil and religious reorganization of the city of Geneva, Calvin outlines his system of elementary education in the vernacular for all, providing instruction in reading, writing, arithmetic, religion, together with the establishment of colleges2 or secondary institutions to prepare for leadership in the Church and the civil government. The constitution which he drew in 1559 for the Collège de la Rive at Geneva is given here at some length, because it served as a pattern for similar institutions in other Calvinistic communities. There were seven classes in the school, the seventh class being the lowest.

Class VII. In this class the pupils will learn the letters, and write them to form syllables, using a Latin-French reading book. Reading Constitution French, and afterwards Latin from a French-Latin catechism. Draw- of the ing, and writing letters of the alphabet.

Class VI. Declensions and conjugations are begun; these occupy de la Rive the first half year. Parts of speech learned in French and Latin; more at Geneva. practice in handwriting. Easy Latin sentences learned orally, and repeated as practice in conversation.

Class, V. Parts of speech finished: elements of syntax; the Eclogues of Virgil read; first steps in written Latin composition; Latin

and French employed side by side.

¹ The secret of Calvin's authority lies in the austerity of his life and his strong, overbearing character, which is evidenced in all his writings. Calvin's style has none of the humor, nor the driving force of his Saxon contemporary, but it has not his vulgarity either. The manner of the Genevan reformer is always classical, his favorite weapon is logic, his appeal is made to the learned few, the leaders, even when addressing the multitude, and therein lies

the source of the power wielded by the "Genevan Pope."

² Corresponding more or less to the American high school and the first

two years of the college.

Class IV. Latin Syntax continued. Cicero's Letters begun; composition exercises are based on these. Prosody, with reading of Ovid in illustration. Greek begun; declension and conjugation; elementary construing.

Class III. Greek grammar systematically learned, with comparison of the two languages. Cicero's Letters, De Amicitia, De Senectute—these treatises to be turned into Greek. The Æneid, Cæsar and

Isocrates read.

Class II. Chief stress laid upon reading: Livy, Xenophon, Polybius, Herodian and Homer. Logic begun: propositions, syllogism to be illustrated from Cicero's orations. Once a week the Gospel narrative

in Greek.

Class I. Logic systematically taught from approved compendiums (such as Melanchton's); the elements of rhetoric in connection with it and elocution. The whole doctrine of rhetoric illustrated from Cicero's speeches, and from Demosthenes (the Olynthiacs and Philippics). Homer and Virgil also analyzed for rhetorical purposes. Two original declamations are prepared monthly. Once a week an Epistle of St. Paul or other Apostles is read in Greek.

Effect of the Reformation on the Schools. We have had occasion several times to note that the leaders of the Reformation had been nurtured in the spirit of humanism. Melanchton was a professor of classical literature before he lectured on theology; Calvin was deeply interested in the classics before he took up the study of the Scriptures. These two men are typical of all the others. It was but natural that the humanistic and religious interests should fuse in secondary and higher education. The study of Latin and Greek was turned to religious purposes; Hebrew took its place by the side of Latin and Greek, Sacred literature by the side of pagan literature. These linguistic studies became the starting-point and foundation in the preparation for the ministry.

The allegiance of the universities was transferred from the Pope to the State, from which they now chiefly derived their support; their teaching, especially in theology, was closely supervised and made to conform to the creed of the reigning family. Not a few universities, on that account, had to change their theology in the course of the sixteenth and seventeenth centuries. The teaching of law was also made to conform to

A fusion of humanistic and religious interests.

¹ Digest from Woodward, W. H., Studies in Education During the Renaissance, pp. 159-160, in Cubberly's Readings in the History of Education.

the national creed in religion and politics; otherwise the work Changes in and organization of the universities remained what it had been of theology in the fifteenth century. The study of philosophy continued to and law. be based on the Aristotelian text, that of medicine on Galen and the same methods of instruction were used. This post-Reformation period in the history of the universities is well characterized by Paulsen in the following passage:

"It was essentially the period of the territorial-confessional university, and is characterized by a preponderance of theological confessional interest. Many new foundations, both Catholic and Protestant, now appeared. The chief impetus leading to these numerous foundations was the accentuation of the principle of territorial sovereignty, from the ecclesiastical as well as the political point of State control view. The consequence was that the universities began to be instru-menta denominationis of the government as professional schools for universities its ecclesiastical and secular officials. Each individual government endeavored to secure its own university in order (1) to make sure of wholesome instruction, which meant, of course, instruction in harmony with the confessional standards of its established church; (2) to retain training of its secular officers in its own hands; and finally (3) render attendance at foreign universities unnecessary on the part of its subjects, and thus keep the money in the country.

"Large amounts of money were not needed to establish a new university. A few thousand guilders or thalers sufficed for the salaries of ten or fifteen professors, a couple of preachers and physicians would undertake the theological and medical lectures, and some old

monastery would supply the needed buildings."1

The control of secondary and elementary schools, like that of the universities, passed into the hands of the State, but that and secondary control was at first more nominal than real. The headmasters schools of the schools, as well as many of their teachers, were Prot-the Church, estant ministers, and the representatives of the Church always had a dominant influence in the boards of control and visitation. The content of secondary school education remained practically as the Reformation had found it: much Latin, less The content Greek, a little mathematics and some general information given narrowly in connection with the study of the classics. The only impor- humanistic.

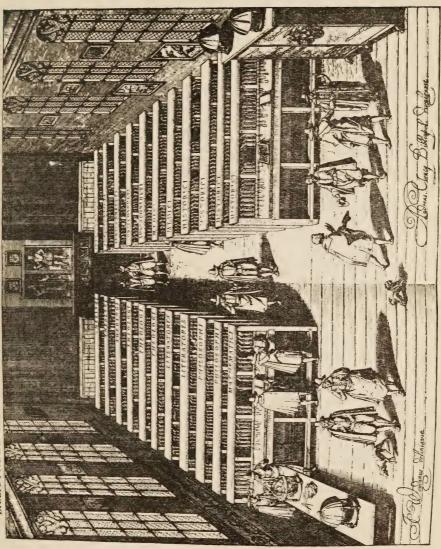
¹ Paulsen, F., The German Universities, p. 36. In the sixteenth century alone there were founded twenty-eight universities distributed as follows: four in Italy, five in Spain and Portugal, eleven in German lands, two in Switzerland and o'e each in France, Scotland, Ireland, Holland, Hungary and Russia. Eighty had been founded previous to 1500.

tant innovation in content was the emphasis now placed on the reading in the original of Patristic literature and extracts from the Bible, and the substitution of some type of Protestant belief for the uniform religious instruction of former days. The curriculum was sometimes distributed over nine or ten years, as we have seen in Sturm's Gymnasium, more commonly over six or seven years. The purpose of education everywhere was intensely religious. Another change to be noted is the incorporation, in some lands, of the secondary schools into some sort of State school system. Saxony led the way in that direction by putting into partial operation the plan drawn by Melanchton in 1528, but the first German State to have a complete school system was Wurtemberg in 1559. According to the plan adopted in that year there were to be established three classes of schools: elementary vernacular schools in every village of the Duchy, Latin or secondary schools with a five or six-year course, and universities or colleges of State. Other German States followed the example of Wurtemberg and by the end of the seventeenth century most of them had a school system of some kind. In England, the grammar schools, which were founded or refounded in the late sixteenth and the seventeenth centuries, were not organized into a system. Though not financed by the Church, they were all supervised by the clergy, but each school was treated as an independent institution.

Schools were sometimes incorporated into a school system.

For the authority of the Church, Protestantism, as we have seen, substituted the authority of one book, the Bible, which the individual was supposed to read and interpret according to the lights of his own judgment. That evidently required the ability to read the Sacred Scriptures in at least one's native dialect, and made it incumbent upon the reformers to substitute the vernacular for Latin in elementary schools. The natural outcome of this exercise of private judgment in matters of faith should have been the dissolution of all creeds and confessions into private opinions. Yet, it is a matter of history that Protestant Churches have endured even unto this day. The

The suppression of the exercise of private judgment.



explanation of this apparent incongruity is not far to seek. In reality, there was no open Bible and no open mind for the masses. Aside from the limitations which are imposed upon private judgment by education, prejudices, environment and the incapacity of most men to judge for themselves, its practice was very soon suppressed by Church and State. The Reformation leaders and secular princes were willing enough to recognize for themselves the right of choosing one's own creed, but they had no inclination to allow the same freedom to the masses. Confessions of faith, symbols, catechisms, embodying the State's religious and civic creeds and, backed up by the secular power, everywhere took the place of the free interpretation of the Scriptures. Church and State entered into a close alliance in order to make the schools an instrument of religious and political control, and to render this control even more certain, some German States, as early as the beginning of the seventeenth century, made attendance compulsory for boys and girls alike between the ages of six and twelve.

QUESTIONS FOR DISCUSSION

- Compare the facilities for education in Western Europe, in 1500 and 1550.
- 2. To what extent could it be said that Luther's Bible determined the character of the German language?
- Contrast Luther's educational opinions as expressed in his "Letter" and his "Sermon" and those embodied by Melanchton in his "Book of Visitation."
- 4. What are the differences, if any, among the Lutheran, Anglican and Calvinistic conceptions of education?
- 5. Contrast the status of the German university professor before and after the Reformation,
- 6. What features of the modern educational system are traceable to the influence of the Reformation?
- 7. Account for the change in Luther's attitude towards reason.
- 8. What benefit, if any, did education derive from the Reformation?
- 9. Was the Reformation a democratic movement?
- 10. Were the results of the Reformation a gain for democracy?

SOURCES

Include, in addition to pronouncements by reformers, all the statutes, decrees, ordinances, regulations of Protestant States, communities and schools. The following are a few of the more important:

Cheney, E. P., Early Reformation in England (Translations and Reprints).

Luther, M., his "Letter" and "Sermon" in Barnard's American Jour-

mal of Education, Vol. IV, pp. 429-441.

Melanchton, P., Book of Visitation, in Barnard's American Journal of Education, Vol. IV, pp. 749-751.

Robinson, J. H., and Whitcomb, M., Period of the Early Reformation in Germany (Translations and Reprints).

Whitcomb, M., Period of the Later Reformation (Translations and Reprints).

The works of Gasquet, Janssen, Leach, listed below, contain a wealth of references besides extracts from original documents.

REFERENCES

Barnard, H., English Pedagogy. Second Series, I-VI. German Teachers and Educators, VI-IX.

Döllinger, F., Die Reformation.

Gasquet, F. A., Henry VIII and the English Monasteries.

The Eve of the Reformation.

Guilday, P., The English Catholic Refugees on the Continent, Janssen, J., History of the German People.

Leach, A. F., English Schools at the Reformation.

Paulsen, F., German Education. German Universities.



A SCHOOLMASTER

CHAPTER VI

THE CATHOLIC REVIVAL



EGINNINGS of the Revival. As early as the first decade of the sixteenth century, a real reform movement, along the lines of Catholic doctrine, Catholic discipline and traditions, had been inaugurated in Spain by the saintly and energetic Cardinal Ximénes. From Spain the movement

reached Italy under the auspices of Adrian VI, who had been the præceptor of Charles V and co-regent of Spain. This Pontiff took up with vigor the work of reform within the Church and he tried to effect the religious pacification of Germany. His plans of conciliation in that country failed, however, as did those of his successors, and the wars which distracted Europe for some time prevented the carrying out of the work of reform within the Church, beyond the frontiers of Italy. Reforms on a larger scale were inaugurated by Paul III. He introduced into the Sacred College eminent churchmen like Sadoleto, Reginald Pole, Contarini, Caraffa, who were employed abroad as legates, and at home in correcting abuses at the Papal court and drawing up plans for the coming Council which, after many delays and postponements, was at last assembled at Trent in 1545. It was convened for "the propagation of the Faith, the elevation of the Christian religion, the uprooting of heresies, the restoration of peace, the reformation of the clergy and the Christian people, and the overthrow of the enemies of the Christian name." Dissolved in 1547, reconvened in 1551 and dissolved again in 1552, it was reassembled ten years later by Pius IV and it concluded its twenty-fifth and final session in 1563. The decrees of that great Council, one of the most

The Council of Trent.

¹ See Waterworth, J., The Canons and Decrees of the Council of Trent; Hefele-Hergenroether, Konziliengeschichte; Cath. Encyc., art. Trent, gives a detailed bibliography.

important ever held in the Church, were both dogmatical and disciplinary. In its dogmatical canons the Council formulated anew the doctrines impugned by the Protestants, among others that of the Real Presence, of the Sacraments, of indulgences and the necessity of good works. The disciplinary decrees dealt with the correction of abuses, the holding of offices, the duties of the clergy, episcopal residence, visitation of churches, clerical celibacy and educational legislation. Within a few years of the closing of the Council of Trent, its decisions had been accepted in all Catholic lands and the work of reform was carried everywhere with great earnestness and vigor.

It is worthy of note that at this juncture, three men, remarkable for their reforming energy, succeeded one another in Three the Chair of St. Peter. Pius V (1565-1572), the last canonized Pope, labored with untiring zeal to restore discipline in the Church and to enforce the reforming canons of the Council of Trent. His heroic virtues earned back to the Holy See the veneration and obedience of the whole Catholic world, and to his foresight and energy Christendom is indebted for the great victory of Lepanto (1571), which forever broke the threatening naval power of the Turks. Gregory XIII (1572-1585) continued the work of reform by the founding of new colleges in Rome, the establishment of standing nunciatures at all the Catholic courts and the rich subsidies which he granted to missions and educational institutions. To this Pope we are also indebted for the reform of the calendar. Sixtus V (1585-1590), who rose to the Papal chair from the humblest extraction, was another progressive and energetic ruler. He cleared

great Popes.

¹ The reform resulting in what is commonly known as the Gregorian Calendar was introduced in order to correct a discrepancy between astronomical or real time and the Julian Calendar arranged by order of Julius Cæsar in 707-708 a.u.c. The Julian Calendar fell back a full day for every 130 years, so that in 1582 it was 10 days behind correct time. Gregory XIII ordered that the 22nd day of December, 1582, old time, should be counted as January 1, 1583. Every fourth year, with the exception of three every four centuries, was to be a leap year, *i.e.*, a year of 366 days. The famous Jesuit mathematician, Clavius of Bamberg, was the chief assistant of Gregory XIII in the preparation of this reform.

the Papal States of the banditti who infested them at the beginning of his reign, regulated the finances, beautified Rome and improved its sanitary conditions, enlarged the Vatican library and reorganized the administration of ecclesiastical affairs.

The educational regulations of the Council of Trent dealt with the foundation or reorganization of parochial schools, encouragement of religious congregations of teachers. preaching, the Sunday schools, the teaching of theology in universities, the supervision of the printing of books and the preparation for the priesthood. With the rise of the universities, there had come a serious decline in the preparation for the ministry. Most cathedrals and monastic schools, in which such preparation was received before the thirteenth century, had lost their best teachers and the higher branches of their curriculum to the great centers of learning; they had become little else than Latin preparatory schools. The comparatively few prospective priests who could avail themselves of the facilities for a higher education received a splendid intellectual training, but very little of a spiritual preparation, and the professional education of the great majority was very much neglected. The Council decreed that every diocese should have its own seminary for the preparation of young ecclesiastics. Pius IV immediately carried out this decree of the Council by founding the Roman Seminary, "which for more than three centuries has been a nursery of priests, bishops, cardinals and popes." At about the same time the Venerable Bartholomew of the Martyrs, Archbishop of Braga, founded a seminary in Portugal and St. Charles Borromeo, Cardinal Archbishop of Milan, established three in his large diocese; he also drew up a set of regulations which were followed in many dioceses. This most important reform of the Council of Trent was soon effected in every part of Italy and by degrees in other Catholic countries; as a consequence, the seminary has now become an essential feature in the life of the Catholic Church. Seminary education extends over a period of twelve years and is divided into general and special preparation. The general or academic

The foundation of diocesan seminaries.



St. CHARLES BORROMEO (BY JEAN MORIN)

phase of this preparation lasts six years and is received in a preparatory seminary, where the aspirant to the priesthood, in addition to Christian Doctrine, the Gregorian Chant and bookkeeping, studies the subjects which are taught in institutions of the same grade, i.e., the classics, the mother tongue and at least one of the living foreign languages, history, geography, mathematics and the natural sciences. The professional preparation takes place in the theological seminaries, in which the first two years are chiefly devoted to the study of philosophy and the last four to that of theology, the Holy Scriptures, Church History, Greek and Hebrew, liturgy and canon law. Far more important than this intellectual preparation is the moral and religious training which the seminarians receive through the discipline of a well-regulated life, the example of their teachers, spiritual conferences and retreats, through prayer, meditation and the use of the Sacraments.

No reform of the Council of Trent has proved so fruitful of good results as this decree for the foundation of seminaries. "If the Catholic world has had for the last three hundred years a more learned, a more moral, a more pious clergy than that which existed in almost every country at the time of the so-called Reformation and whose tepidity and faithlessness contributed largely to the growth of the Schism, it is wholly due to this decree of the Council of Trent and to it we in this age owe our thanks."2

Elementary education.

Elementary education received no less attention than the seminaries from the Council of Trent. Again and again provincial councils3 and diocesan synods deal with the question of parish schools in the sixteenth and seventeenth centuries and. as we shall see very soon, a host of zealous teachers for these schools were provided by new religious congregations.

¹ Such at least is the desideratum and practice whenever it is possible. Though young men preparing for the priesthood might receive all the knowledge they need in any Catholic high school and college they would not find in these institutions the particular surroundings, atmosphere and training which an episcopal school provides for them.

2 Hefele, F., Tübinger Quartalschrift, No. 1, p. 24.

3 See Mansi, Collectio Conciliorum, Vol. XXXIII.

The Catholic Revival was greatly furthered by a splendid array of saintly men and women who exercised a deep and widespread influence over their contemporaries. Only a few of the most prominent of these Catholic heroes can be mentioned here. Pope St. Pius V (1504-1572), who has already The Saints been referred to; St. Ignatius Loyola (1491-1556), the of the founder of the Society of Jesus; St. Girolamo Emiliani (1481-1537), the founder of the Somaschi; St. Juan de Dios of Portugal (1495-1560), the founder of the Order of Charity; St. Francis Xavier (1506-1552), the Apostle of India and Japan; St. Philip Neri (1513-1595), the founder of the Oratorians; St. Charles Borromeo (1538-1584), founder of the Oblates of St. Ambrose; St. Francis de Sales (1567-1622). the Apostle of Geneva; St. Peter Canisius (1521-1597), the Apostle of Germany; St. Vincent de Paul (1576-1660), the friend and benefactor of the poor; the Venerable Cardinal Baronius (1528-1607), distinguished ecclesiastical historian; Blessed Cardinal Bellarmine (1542-1621), eminent theologian; St. Joseph Calasanza (1556-1648), founder of the Piarists; St. Theresa of Avila (1515-1583), reformer of the Carmelites; St. Angela Merici (1529-1582), foundress of the Ursulines; St. Jane de Chantal (1572-1641), foundress of the Visitation, and St. Rose de Lima (1586-1617), the first American canonized Saint.

New Religious Congregations. The Catholic Revival brought new fervor into existing religious congregations and led to the foundation of new ones. Special congregations aiming at the strict observance of the original rule arose in several religious orders. Such were the Capuchins, the Recollects and the Alcantarines, three branches of the Franciscan Order; the Discalced Carmelites, both men and women, instituted by St. Theresa, and the Discalced Augustinians. The famous congregation of St. Maur, established in France in 1618, had for its aim the revival of the original austerity of the Rule of St. Benedict and the advancement of secular and sacred learning. New congregations of "Clerks Regular" and "Secular Priests"

were founded to train the clergy and foster among them a vigorous ecclesiastical spirit, or to devote themselves to missionary labors, instruction of the people, or various works of mercy. There were also founded many orders of Brothers and Sisters, most of them devoted to teaching. These new congregations are listed here chronologically:

CC1	TEL	e 1 1	1504
The	Theatines	founded,	1524
The	Barnabites		1530
The	Society of Jesus		1530
The	Society of Jesus	44	1534
The	Ursulines	. 44	1537
The	Ursulines	44	1540
The	Oratorians	66	1558
The	Oratorians	44	1574
The	Oblates of the Blessed Virgin and		
	St Ambrose	66	1578
The	St. Ambrose	66	1584
The	Clerks Regular Minor	. 44	1588
The	Congregation of Christian Doctrine.	66	1592
	Sisters of Notre Dame	6.6	1598
		66	1602
The	Piarists	66	1602
The	Institute of Mary	46	
The	Order of Visitation	66	1610
The	French Oratorians	"	1613
The	Lazarists		1625
The	Daughters of the Presentation		1627
The	Sisters of Charity	66	1634
The	Port Royalists	64,	1637
The	Sulpicians	6.6	1641
The	Eudists	64	1643
The	Daughters of Providence	66	1643
	Sisters of the Refuge, known later as		
	the Sisters of the Good Shepherd .	46	1646
The	Sisters of St. Joseph	66	1650
	Sisters of Mercy of Borromeo	44	1652
The	School Sisters of Notre Dame	66	1657
The	Congregation of Notre Dame of Mon-		1007
1116	tran1	66	1657
The	treal	44	1684
			1084
The	Sisters of the Presentation of the	**	1.004
	Blessed Virgin	.,	1684

Some of these congregations, on account of their influence on Catholic education, will be considered at some length in this and in Chapter X.

The Doctrinarians.

The Congregation of "Secular Priests of Christian Doctrine" or "Doctrinarians" (*Prêtres Séculiers de la Doctrine Chrétienne*) was founded in 1592 by the Venerable Cæsar de

Bus, a French priest, for the religious instruction of the young. through preaching and catechizing. The congregation rapidly spread in France and Italy. At about the same time and for the same purpose, de Bus founded the order of the "Daughters of Christian Doctrine" (Filles de la Doctrine Chrétienne), who, a little later, became Ursulines. A few years before, through the initiative of a wealthy Milanese nobleman, Marco Sunday de Sadis-Cusani, there had been established in Rome an association of priests and laymen, who were pledged to instruct children and adults in Christian Doctrine. Eventually the association branched off; the priests formed the Congregation of "the Fathers of the Christian Doctrine" and the laymen the "Confraternity of Christian Doctrine." The latter was erected into an archeonfraternity in 1607 and it spread rapidly over Italy, France and Germany. The Piarists or Patres Piarum The Scholarum were founded by St. Joseph Calasanctius, a Span-Piarists. ish priest of a noble family, who had received the degree of Doctor of Law at the University of Lerida and completed with honor courses in theology at Valencia and Alcala. In 1597 he founded in Rome a free school for poor, neglected boys and girls. He was encouraged in his good work by Pope Clement VIII and, thanks to the contributions made by this Pope and many other generous benefactors, he was soon in a position to care for the education of hundreds of children. In 1602 St. Joseph Calasanctius was able to lay the foundation of the Order of the Piarists, which was officially recognized as a teaching Order in 1621 by Gregory XV, the founder of the Sacred Congregation of Propaganda.² The labors of the Piarists were chiefly confined to the field of elementary education for the poor, first in Italy and Spain, then in Central Europe.

schools.

¹ The lineal ancestor of the various associations of laymen devoted to

religious instruction in Sunday schools.

Its official title is "Sacra Congregatio Christiano nomini propagando" and it is concerned with the spread of Catholicism and the adminant in the spread of Catholicism and the adminant is concerned with the spread of Catholicism and the adminant is concerned with the spread of Catholicism and the adminant is concerned with the spread of Catholicism and the adminant is concerned with the spread of Catholicism and the adminant is concerned with the spread of Catholicism and the adminant is concerned with the spread of Catholicism and the adminant is concerned with the spread of Catholicism and the adminant is concerned with the spread of Catholicism and the adminant is concerned with the spread of Catholicism and the adminant is concerned with the spread of Catholicism and the adminant is concerned with the spread of Catholicism and the adminant is concerned with the spread of Catholicism and the adminant is concerned with the spread of Catholicism and the adminant is concerned with the spread of Catholicism and the adminant is concerned with the spread of Catholicism and the adminant is concerned with the spread of Catholicism and the adminant is concerned with the spread of Catholicism and the spread of C istration of ecclesiastical affairs in non-Catholic countries. It should not be confused with the "Society for the Propagation of the Faith," an international association founded in Lyons in 1822 for the assistance of Catholic missions by prayers and alms. See Cath. Encyc., arts., Propaganda and Propagation.

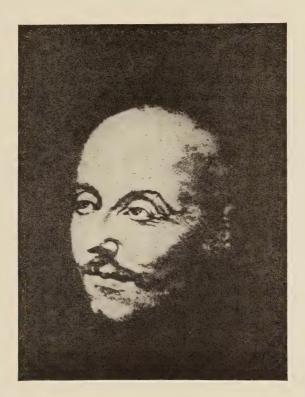
The Ursulines.

The first religious congregation of women established for the sole purpose of educating young girls was the Order of St. Ursula or Ursulines founded by St. Angela Merici (1474-1540), a native of Desenzano, a small village in Lombardy. Beginning at Brescia in 1535 as a small community of twelve members, the new Institute spread rapidly into Italy, France and Germany. In 1544 the Order received its first papal approbation, and in 1572 St. Charles Borromeo, the cardinal archbishop of Milan, obtained for them the status of a monastic Order with enclosure. This early rule is still adhered to in a few communities, but in most countries it was modified to meet local conditions. The first Ursuline establishment in North America was founded at Quebec in 1639 and the first one in the United States in 1727 at New Orleans, where it is still flourishing. From their earliest foundation the Ursulines labored in all the departments of female education and proved themselves most efficient and progressive teachers. The College of New Rochelle, one of the leading Catholic colleges for women in the United States, is conducted by them.

St. Ignatius Loyola. The Foundation of the Society of Jesus.¹ St. Ignatius Loyola, the founder of the Society of Jesus, was born in or about 1491 in the heart of the western Pyrenees, the youngest son of a Spanish nobleman. Very little is known of the early life of the Saint, except that he won military distinction in an attack on the little town of Najara and was conspicuous at the siege of Pampeluna, where he was seriously injured, and, as a consequence, confined to bed for several months. During this period of enforced idleness, through lack of any other books, he read the Lives of Christ and the Saints and underwent a complete spiritual transformation. Henceforth, he would be a soldier of the King of kings. When sufficiently restored to health, Ignatius first repaired to the famous sanctuary of Montserrat, thence to the neighboring little town of Manresa, where he spent a year in penance and meditation,

¹ For a more detailed account, see Campbell, T., The Jesuits, pp. 1-36.

the outcome of which was the famous Spiritual Exercises, which play such an important part in the formation of the young Jesuit. Upon leaving Manresa, he begged his way to the Holy Land, then returned to Spain with a view to obtain-



figma sins of deloph of

ing the education which he needed in order to carry out the plans he had conceived. Though already past thirty, he began the study of Latin in one of the grammar schools at Barce-

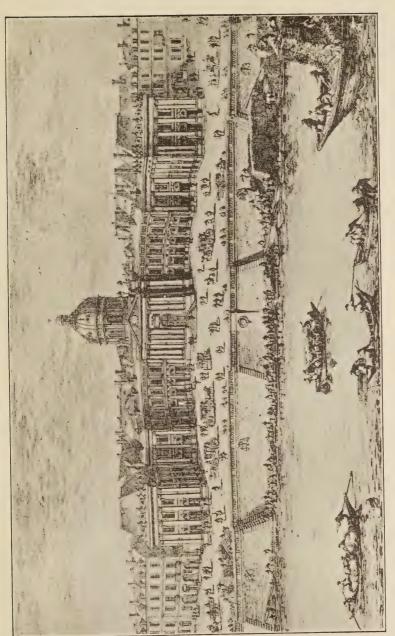
The Society of Jesus:

command of the language to take up the arts course at the University of Alcala. Persecution for his religious views drove him from that university as also from Salamanca, and he finally repaired to Paris, where he received the Master's degree in 1535. It was in Paris that Ignatius gathered around him the men who were to be the foundation stones of the Society; they were Peter Faber, Francis Xavier, James Laynez, Alphonsus Salmeron, Nicolas Bobadilla and Simon Rodriguez. On August 15, 1534, Ignatius led his companions to a little church on the hill of Montmartre and with them took there the vows of poverty and chastity, and a third vow to go to the Holy Land after completing their studies. Being prevented by war from fulfilling this third vow, they put themselves at the disposal of the Pope for any service he might see fit to assign to them. At the same time, they sought the approval of the Holy See for their association and this was granted in 1540. Ignatius had suggested for the new congregation the name "Company of Jesus," but the Papal letters referred to it as the "Society of Jesus," under which title it has been known ever since in the English-speaking world.

its aim.

The ultimate aim of the Society, admirably expressed in its motto, "A. M. D. G.," "Omnia Ad Majorem Dei Gloriam" (All for the Greater Glory of God), is to lead souls to God. That aim is achieved in a number of ways, which are dictated by the needs of the time, and are broadly outlined in the Constitutions of the Society and Papal letters of approbation. Thus, some Jesuits are assigned to parishes, others are preaching

[&]quot;Societas Jesu" in the Bull of approbation (Regimini militantis ecclesiæ, 27 September, 1540). The members of the Society fall into four classes: (1) novices, either received as lay brothers or aspirants to the priesthood; (2) formed scholastics, i. e., aspirants to the priesthood who have completed their novitiate, but are still in the period of preparation, which may last from two to fifteen years; (3) formed coadjutors, whether formed lay brothers or priests who make the three usual vows of poverty, chastity and obedience; (4) professed members, all priests, who make in addition a fourth vow by which they undertake to go wherever they are sent by the Pope.



COLLEGE OF THE FOUR NATIONS

or laboring in far-distant missions among the heathens; others still are engaged in literary work or scientific researches; most of them are teaching,1 but all of them have but a single purpose: to labor for their own salvation and that of their neighbors in whatever field the Providence of God has assigned to them.2

organization,

The organization of the Society, its administration, its object and the means to be used in order to achieve it, are contained in the Constitutions,3 ten in number, which are practically to-day what they were when drafted by the founder and first approved by the Holy See. The whole Order is divided into Provinces, several of which make up an Assistancy. The Assistants (there are six at present) are elected by the General Congregation from the various Assistancies. They form the Council of the General, who is elected for life by the General Congregation and, under the Constitutions, has supreme administrative power in the Society. At the head of each Province there is a Provincial Superior, who is appointed by the General and directly responsible to him for his administration. The Rectors of universities and colleges and the Masters of novices are also appointed for a certain number of years by the General, but they are accountable to the Provincial.

¹ Teaching is expressly mentioned in the last vows: "I vow according to obedience a special concern for the education of boys."

There are many editions in Latin. Versions in the vernacular are not

always reliable. See Humphrey, W., The Religious State.

² Even a very brief account of the various activities of the Society would supply material for a large volume. De Backer-Sommervogel's "Bibliothèque des écrivains de la Compagnie de Jésus" (10 vols.) contains thousands of names of writers, with an almost endless list of books, pamphlets, treatises, editions. There have been published many histories of the Society, both general and particular; Heimbucher, Die Orden und Kongregationen der katolischen Kirche, contains a good bibliography of these. Campbell, Th., The Jesuits, gives a list of some of these histories. See also Cath. Encyc., art. Society of Jesus. A monumental history of the Society was begun in Rome in 1892 and is still in progress; in connection with it there has been published in Madrid the Monumenta Historica Societatis Jesu, a huge collection of material relating to the early history of the Society. See also Carayon, Documents inédits de la Compagnie de Jésus (Paris, 23 vols.).

The Order spread with great rapidity, not only in Europe, spread, but in China, the Indies and the Americas; by 1600 it had established two hundred colleges, universities and training seminaries; by 1700 the number of collegiate and university establishments had risen to 769. In the eighteenth century, it had more than 22,000 members, of whom fully one-half were engaged in teaching. Most of the Jesuit institutions were large, well-supported and well-equipped establishments, with spacious play-grounds, dormitories and dining-halls. Some of the colleges, like that in Rouen, had as many as two thousand students, many between six and eight hundred; at the beginning of the seventeenth century, the Province of Paris alone enrolled more than thirteen thousand students; the average attendance seems to have been at least three hundred, which would give a grand total of more than two hundred thousand boys and youths educated by the Order in the eighteenth century. This great army of students was recruited from all classes of society and to all instruction was given free of charge; the Constitutions and other documents of the Society expressly state that mean extraction and poverty should never be a hindrance to admission. In fact, there were always many poor students in the Jesuit schools and not infrequently they were supplied with books and received free board and lodging.

The success of their schools and the influence which the Jesuits wielded in the intellectual and moral world aroused intense jealousies and hatreds in many quarters. The intrigues of its enemies at last succeeded in bringing about the fall of the Order. "For the sake of peace," Pope Clement XIV suppressed it in 1773.1 Re-established in 1814 by Pius VII, the Order immediately resumed its former activities, and its and re-estabachievements during the last hundred years have been in every respect worthy of its glorious traditions; nay, considering the handicaps under which the Society had to struggle into a new existence and the constant persecution going on against

¹ See Crétineau-Joly, Clement XIV et les Jésuites.

it in one country or another, its achievements must be pronounced even more remarkable than before the suppression.

The Jesuit Plan of Studies. The general principles of Jesuit education as conceived by St. Ignatius are laid down in the fourth part of the Constitutions, which also states that "a number of points will be treated of separately in some document approved by the General Superior."1 This promise of a more detailed plan of studies was fulfilled under the generalate of Fr. Claudius Aquaviva (1581-1615). Before that time. the Jesuit colleges, while following the general principles of the Constitutions, had adopted, more or less, the practices of the countries in which they were located; there was no uniform plan of studies, no system of Jesuit education as such. With the spread of the Society and the rapid increase in the number of the colleges, the need for such a system was felt more and more, and in 1584 Fr. Aquaviva determined to fulfil the promise made by St. Ignatius. He appointed a committee of six experienced professors called to Rome from different provinces and nations; after about a year of study and consultations, these men submitted a tentative plan of studies to the General. This plan was sent to each Provincial with the request to have it examined and criticized by at least five men of sound judgment and solid scholarship. The reports of the provinces were then examined by a committee composed of the most eminent professors of the Roman college and three members of the first committee; in this way, a second plan was drafted which, after examination by the General and his Assistants, was sent to the provinces in 1591. It was reported upon three years later by the Provincials when they came to Rome for the fifth general congregation of the Society. Finally, in 1599, after fifteen years of study, experimenting, criticism and corrections the Jesuit plan of studies appeared

Preparation of the Ratio.

¹ Const., P. IV, cap. XIII, Decl. A.

² Monumenta Historica Societatis Jesu (Monumenta Pædagogica, 1901-1902) contain several of these early Jesuit Plans of Studies.

in its final form under the title Ratio atque Institutio Studiorum Societatis Jesu, usually quoted as Ratio Studiorum.¹

The Ratio is not a learned discussion of educational principles or practices; the discussions, as we have seen, had taken place while the document was in the process of elaboration. Such as it appeared in its final form in 1599, the Jesuit Plan of rules of Studies is a code of regulations for the conduct of the schools of the Society of Jesus. It states the aim of the Order in education and the rules governing the work of its administrative officers, professors and students. That, however, should not convey the impression that the provisions of the document are rigid and final. "The Ratio Studiorum is a plan of studies which admits of every legitimate progress and perfection, and what Ignatius said of the Society in general may be applied to its system of studies in particular, namely, that it ought to suit itself to the times and comply with them, and not to make the times suit themselves to it."2 In point of fact, a brief comparison of the old Ratio with the present one, or of the syllabuses of Jesuit schools in different provinces shows that there is nothing hard and fast in the Jesuit Plan of Studies.

The regulations of the *Ratio* are divided into four groups. Those in the first group concern administrative officers: Provincials, Rectors and Prefects of Studies. The rules in the second group are those for the Professors of the higher faculties of the universities and seminaries, where Sacred Scripture, theology, canon law and similar subjects are taught. In the third group are found the rules for the Professors of the

² Genelli, The Life of St. Ignatius, in Schwickerath, R., Jesuit Education, p. 280.

¹ See Pachtler, G. M., Ratio Studiorum et Institutiones Scholasticæ Societatis Jesu, in Vols. II, V, IX, XVI of Monumenta Germa-niæ Pædagogica. Like all wise legislators, the framers of the Ratio Studiorum sought to profit by the lessons of the past and they embodied into their Plan of Studies the best elements of the various systems existing in their own time, especially at Paris and in the schools of the Brethren of the Common Life. The greatness and originality of their work lies in their having built an organism which has stood the test of centuries, which breathes the spirit of the best Christian traditions and has been an inspiration to many Catholic and non-Catholic educators.

faculty of Arts or Philosophy, Professors of mathematics, natural science and philosophy. The regulations in the last group concern the Professors of the Humanities. Then follow various rules concerning the students, literary and debating societies, etc. The rules of the last two groups are those for the old college with a full course in humanities and philosophy, corresponding somewhat to a combination of the American high school and college.¹

The Jesuit College

The government of a college is in the hands of a Rector or President, assisted by a Board of Consultors, whose opinion he is obliged to ask on all matters of importance. His authority is, furthermore, limited by the rules governing his office. He is expected to exercise a general supervision over studies, to inspect classes from time to time, to advise teachers, and, so far as possible, to take a personal interest in each pupil. His subordinates must carry out his instructions, but they can appeal from his decisions to the Provincial who visits the colleges once a year, when every teacher has to see him privately and may lay any grievances before him. The chief assistants of the Rector are the Prefect of Studies and the Prefect of Discipline. The first of these two officials is in charge of the organization and supervision of class-room work: assignment of students to their classes, texts to be used. amount of work to be done, matter of examinations and appointment of examiners; he is to visit each class once in two weeks. The Prefect of Discipline is responsible for all that concerns conduct.

As we have seen in the outline of the Ratio, apart from the university and professional studies, the curriculum of the schools conducted by the old Society consisted of the arts

¹ Elementary schools are not excluded from the Jesuit system of education. Elementary schools were maintained in the Jesuit missions, for example, at Quebec as early as 1635, at Newton, Maryland, as early as 1640 and in the Paraguay Reductions. The Constitutions expressly declare that "....it would be a work of charity to teach reading and writing, if the Society had a sufficient number of men. But on account of dearth of men we are not ordinarily used for this purpose."—Const., P. IV, Cap. 12, Decl. C.

course or philosophy and the humanities, styled Studia Inferiora, or lower studies. The aim was, as it is to-day, culture in the best and fullest sense of the term. The means might vary from age to age or from country to country, but the purpose ever remains the same: to draw out, to develop and discipline all the latent powers of the boy and youth; in other words, Jesuit education aims at forming a man before attempting to form a specialist. The Studia Inferiora, corresponding somewhat to the American high school and part of the college, were divided into five, sometimes six, classes: lower grammar, middle grammar, upper grammar, humanities and rhetoric, included the humanities the work done in each class being in substance as follows:

Lower Grammar: The elements of Latin grammar, together with easy selections from Cicero, Phædrus and Nepos; in Greek, reading, writing and the rudiments of grammar.

Middle Grammar: A more advanced study of Latin grammar with the reading of the Commentaries of Cæsar, a few of the easiest poems of Ovid and selections from Cicero; in Greek, the study of grammar, the fables of Æsop, selections from Lucian and the Tablet of Cebes.

Upper Grammar: A complete knowledge of Latin grammar, together with the figures of rhetoric, the art of versification and the study of selections from Cicero, Ovid, Catullus, Tibullus, Propertius and Virgil; in Greek, the study of grammar and selections from St. Chrysostom, Æsop, or similar writers.

Humanities: The work done in this class was to be a direct preparation for rhetoric, and it consisted in Latin, of abundant readings from prose writers and poets, Cicero, Cæsar, Sallust, Livy, Curtius, Virgil, Horace and others; in connection with these readings there was given some general information (eruditio) and some precepts of composition; in Greek the course included versification, acquaintance with the dialects and some composition, together with readings from St. Chrysostom, St. Basil, St. Gregory of Nazianzus, Plato, Homer, Theognis, Plutarch, Synesius, Phocylides or similar authors.

Rhetoric completed the humanistic preparation and pre-

pared for philosophy; the precepts were to be learned from Cicero, Quintilian and Aristotle; the style was to be modelled on that of Cicero, whose orations were the subject of careful study, though other prose writers and poets might be drawn upon. In Greek the course aimed at a fuller knowledge of the language and a wider acquaintance with its literature; the list of readings included Plato, Demosthenes, Thucydides, Homer, Hesiod, Pindar, St. Chrysostom, St. Gregory of Nazianzus, and St. Basil. Erudition, drawn from the history, institutions, manners, culture of Greece and Rome, was to be given more freely than before.

Very early in the course, Latin and Greek composition became a prominent feature of class-room work and at least once a year in many Jesuit colleges there was a dramatic exhibition.¹

and philosophy.

After completing his humanistic course, the student might take up the study of philosophy or arts course, which usually lasted three years and included logic, cosmology, metaphysics, psychology and ethics, together with mathematics and the natural sciences. As remarked before, this plan of studies was not supposed to be slavishly adhered to everywhere. In fact, there were many variations dictated by the demands of time and locality. History and geography, though not nominally listed among the subjects of the curriculum, were taught everywhere from the very beginning of the Society under the name of erudition in connection with the study of Latin and Greek authors; geography was taught in a more systematic way in connection with the study of astronomy and there is plentiful documentary evidence to show that, long before the end of the seventeenth century, history and geography² were

¹ These exhibitions quite often assumed the proportions of an event of the greatest interest for the city where they took place. See Janssen, J., History of the German People, Vol. VII, pp. 128-129; De Rochemonteix, C., Un Collège de Jesuites, pp. 96-99; Trautmann, K., Ober-Ammergau und sein Passionsspiel, p. 47.

² Many members of the old Society have made important contributions to the science of geography. Through its missionaries (e.g., Marquette, Nobili, Ricci) it was in a particularly good position to supply the colleges with first-hand information about foreign lands.

taught as separate subjects in the humanistic course, in at least some of the Jesuit colleges; the others gradually followed their example.

Like all secondary schools of the period, the Jesuit colleges emphasized the study of the ancient classics1 as a means of intellectual training and culture, but the mother tongue was never neglected, and its systematic teaching was taken up in the schools of the Order at a much earlier date than in many other schools of the time. The standard author in philosophy was Aristotle, commented, of course, and refuted whenever his teaching contradicted religious truths. All through the course of study there was given religious instruction, consisting of the teaching of the catechism and reading of the Gospels. Such, in very brief outline, was the original Ratio. Modifications have been introduced into it in the last hundred years² in order to adjust Jesuit education to the changes which have taken place in educational practice during the nineteenth century; thus, more time is given now to the study of the mother tongue and the sciences; the modern languages have been introduced into the curriculum; the teaching of science runs parallel to that of language instead of being kept for the last three years of general education. But these changes, after all, affect only minor elements of the system; its essentials, its fundamental principles, have remained what they were when the original Ratio was drafted.

The Jesuit Method of Study. The first and most typical feature of the Jesuit method of instruction is the "prelection" (præ-lectio) which, in so far as lower classes are concerned, has practically the same meaning as the term "expla- The nation." Given, let us say, a passage from Cicero, which is to prelection,

² Revised Ratio of 1832 and later minor regulations.

On the educative value of the study of the classics see among many the following references: Fitch, J., Thomas and Matthew Arnold, p. 49; Newman, Idea of a University; Report of Commissioner of Education, 1889-90, Vol. I, pp. 343-398; Schwickerath, R., Jesuit Education, ch. XII; Willmann-Kirsch, The Science of Education, Vol. 11 July 2017 Vol. II, ch. XX.

be the assignment for the next day, the teacher reads first the passage from beginning to end in order to impress on the class the correct quantity of the Latin syllables and to convey to them, so far as possible, the meaning of the passage through the inflections and tone of the voice. This expressive reading is repeated immediately by as many students as time will allow. and then again on the next day. The teacher then briefly gives the gist of the passage and, if it is connected with the preceding, makes clear the nature of the connection. He then takes up the study of each sentence, elucidates the obscurities which the words and constructions may contain, translates this sentence word for word, and when the sense has been made clear. gives a free, more elegant version. This is followed by the consideration of what pertains to syntax or poetry or rhetoric, according to the class, in the passage under consideration. Then comes the "eruditio," sometimes called Greek and Roman antiquities, general information relating to the passage which is studied: history, geography, political and social organization, customs, myths, religion, the moral lessons which the study of the text may suggest and, finally, general remarks on the vocabulary and phraseology of the passage, intended to widen the scope of the student's knowledge of the language. All through the prelection the students are frequently called upon to elucidate points of vocabulary and grammar, literature or general information previously explained, and thus they are made to take an active participation in the work of preparation. The first part of each day's session is usually devoted to a recitation, bearing on the matter explained the preceding day and any additional matter the class may have been requested to prepare at home. There are also assigned frequent themes or written compositions based on the text read. The plan and the scope of the prelection varies, of course, with the teacher, the class and the subject. Thus the general information, which is an important feature of the prelection in the higher classes, is but incidental in the lower ones; thus again the teacher, instead of presenting it entire at the end of the preparation.

eruditio,

might give it piecemeal as the occasion arises. These and other variations in the use of the prelection are clearly implied in the language of the Ratio and they do not affect the principles involved: that the pupil must be shown how to study and be trained under the teacher's eye in accuracy and thoroughness of work. It is with the same end in view, namely, thoroughness and accuracy in knowledge, that the Ratio insists so much on review, repetition and memory work.1 There should repetition, be every day a brief review of the matter just explained and a review of the previous day's work; once a week a careful review of the more important points examined in the preceding week's program; in many colleges a general review concludes the term or year's work. Words, paradigms, rules and definitions, once explained and understood, must be committed to memory as also choice passages from the authors read. As remarked before, written exercises, increasing in length and complexity as the work progresses, are another important item in the Tesuit method of teaching, but, next to the prelection, its most characteristic feature is perhaps its appeal to the spirit of emulation which it fosters in various ways. "Many means emulation, are devised, and exercises employed, to stimulate the minds of the young: assiduous disputation, various trials of genius, prizes offered for excellence in talent and industry. As penalty and disgrace bridle the will and check it from pursuing evil, so honor and praise quicken the sense wonderfully to attain the dignity and glory of virtue."2 A favorite device, at least in the lower classes of the old schools, was to divide the class into two camps or armies with various officials in

¹ The old pedagogy rightly insisted on the importance of memory in the process of learning. Knowledge becomes our own and contributes to our intellectual growth only through constant repetition, exercises, applications. Other views have been given currency by the innovators of the seventeenth and eighteenth centuries, who have rightly been charged with "knowing naught of the mystery of memory, of being familiar only with the parrot's mechanical memory, but not with the spiritual and vital powers of the human memory." Raumer, K., Geschichte der Pädagogik, II. p. 6.

² Ribadeneira, P., quoted by Hughes, T., Loyola, p. 90.

both. Each pupil had his own rival or *cmulus* in the opposite camp, who rose whenever he was called upon to answer and tried to correct him in some error. Other means commonly resorted to, in order to arouse the activity of the pupils, are oratorical contests and academies. The latter are voluntary associations of students, literary or scientific societies, in which essays are read or even lectures given by a member of the academy on some subject, after which takes place a general discussion, in which all are expected to participate. To this wise appeal to the spirit of emulation must be ascribed, in a large measure, the mildness of the discipline that prevailed in the Jesuit schools. The rod, so generously used in other schools, was seldom appealed to in theirs and its use was allowed only under rigid regulations.¹ Another feature of Jesuit education worth mentioning at this point is the encouragement of outdoor sports, not only on physical, but also on moral grounds.

The Training of the Jesuit Teacher. Many factors have contributed to the splendid success of the Jesuits in education: the strong organization of the Society and its careful supervision of studies, its plan of class organization, its practical and carefully worked out methods of instruction, its well-defined aim and the zeal with which its members have labored for its achievement. Far more important than all these, however, is the training which the Jesuits receive. As a recent historian of the Society expresses it: "The real secret of the Jesuits' influence is to be found in their training."

The candidate for admission into the Order must possess good health and strength, together with the talent and disposition for study; his character must be without blemish and he must show a readiness for the life of self-denial which is the life of every religious. None is admitted who has not at least completed the high school; many enter the Society after graduation from the college and some even after taking

¹ See Schwickerath, R., Jesuit Education, p. 617. ² Ibid., p. 415.

university courses. During the first two years of his preparation, the young Jesuit is known as a novice. He has to perform all kinds of menial tasks in order to teach him the vir- novitiate, tues of humility and obedience; he receives instruction on the explanation of the Christian Doctrine, teaches the catechism to children and has frequent oratorical exercises. Part of his time is also taken up with the study of the classics and the mother tongue. On the whole, however, this first stage in the preparation of the young Jesuit is a period of intense spiritual training; through prayer, self-examination, daily meditations on the end of man and the life of Christ, the constant practice of self-control and self-denial, the young religious not only receives a solid moral training, but he acquires that practical knowledge of human nature, which is indispensable to the teacher in order to deal effectively with his pupils. The novitiate is followed by the juniorate, during which the young the Jesuit reviews his classics in theory and practice for one, two, or three years, the length of the period depending on the previous study of these subjects. The next three years are devoted to a study of mathematics, natural science and philosophy. The lectures of the professors in these subjects are supplemented by frequent exercises, especially "disputations," in which the students have to discuss in Latin and in most the systematic fashion the matter expounded by their professors. scholasticate, All the while, the prospective teacher has seen applied by competent masters the methods of teaching the linguistic and scientific subjects; besides, those showing special abilities in some particular branch are allowed to devote much of their time to its study, and for several weeks, previous to taking up teaching, all receive systematic instruction in methodology. Leaving out of consideration the period of elementary education, the academic preparation of the Jesuit teacher has thus lasted on an average for twelve years and his professional training at least six years. He is then assigned to a position corresponding to his abilities; he teaches in the same class as many branches teaching, as he has mastered, in order that he may have ample opportunity to form a good, personal opinion of the character and

abilities of every student and thus be in a position to give the advice and guidance that circumstances may require. Not uncommonly, and with the same end in view, the teacher goes up to the higher grade with his class. The last stage in the Jesuit's preparation for his life's work takes place after he has taught for three or four years. He is then sent back to the Provincial House of Studies in order to study theology for four years preparatory to his ordination, which commonly takes place at the age of thirty-two. For some members of the Society the preparation does not even stop there; they continue to study for one or two additional years in some special branch.

the last stage.

Moral and Religious Training. However different in other respects, all educational systems agree in this: that education should develop the moral sense, should strive to make men better.¹ This consensus of opinion as to the moral end of edu-

General acceptance of moral aim,

¹ The trend of Oriental education has ever been strikingly ethical; a combination of the beautiful and the good was the Greek educational ideal; solid moral worth, devotion to the Roman State, was the aim of Roman education; the Stoics, like Socrates, considered ethics as the only science having real intrinsic value; Aristotle's treatment of education is essentially ethical and so is Plato's; for both, the chief concern of the educator is to imbue the citizen with the moral principles that will insure the existence of the State. Christian education was from the very beginning and it has ever remained essentially moral. In modern times instances are not wanting of the explicit recognition of the moral aim in education. We have seen that this moral purpose was emphasized by humanistic writers. Comenius defines the aim of education in terms of knowledge, virtue and piety. According to Locke, "'Tis Virtue, then, direct Virtue, which is the hard and valuable part to be aimed at in Education." Herbart sums up the whole work of education in the concept "morality." The same emphasis on the moral purpose of education is seen in school regulations that have come down to us and in the pronouncements of statesmen on this subject. Thus, for example, we read in the Massachusetts Constitution of 1780 that "wisdom and knowledge, as well as virtue, diffused generally among the body of the people, being necessary for the preservation of their rights and liberties it shall be the duty of the legislatures and magistrates to countenance and inculcate the principles of humanity and general benevolence, public and private charity, industry and frugality, honesty and punctuality in their dealings; sincerity, good humor, and all social affections and generous sentiments among the people."

cation ceases, however, when educators have to determine the means by which that end can be achieved. Modern pedagogy inclines to the view that morality will naturally flow from instruction, if the latter be given in such a way that it will not only impart knowledge, but develop all the latent powers of the child, in order to make of him a well-informed, skilful, self-supporting, useful member of the community. Catholic educators, on the other hand, have ever insisted on the vast as to means. difference between knowledge and conscience, between skill and virtue, between intellect and will. Knowledge and skill, whether they are employed for culture, expression of self, or turned to practical ends, will make the individual better only if made subservient to higher aims. Culture, unless it rests on the solid basis of morality, will lead to a selfish enjoyment of one's mental powers and a vain display of ability. Education for efficiency, without the leaven of a higher aim, will see nothing more in practical ends than a question of material profits to be obtained by any means whatsoever. Moral education alone can correct the shallow, vainglorious selfishness of The Catholic mere intellectual culture, and save efficiency from the sordid materialism to which it is exposed. But true morality does not flow naturally from studies. It is true, that because they demand systematic effort and compel the mind to follow the line of what is objectively true or beautiful, learning and practice discipline intellect and will, but this discipline cannot of itself build up a good moral character. The student must be shown that the true, the beautiful and truly useful all meet in the good, which should become his guiding principle. Morality cannot be let alone to take care of itself in the wake of intellectual development; it is not a mere appendix to intellectual education, or the result of a harmonious development of man's inner nature, but the fruit of a process of transformation. Morality means the practice of a host of virtues which, far from coming naturally to man, are the result of a long, strenuous struggle against his natural dispositions.

The means of moral training in the Jesuit schools are "The

Moral training in Jesuit schools example of a virtuous life, reasonable supervision, ethical instruction and certain means provided by the Church, especially the Sacraments."1 There is no greater and, at the same time, no more subtle teacher than imitation. We think, and say, and do what others are thinking and saying and doing, especially those who have caught our fancy or admiration. Nay, unconsciously, we imitate the forms and sounds which meet our senses or haunt our memories, and that explains why environment counts for so much in our lives, particularly during the formative period of impressionable childhood and youth. This paramount educative influence of imitation has ever been recognized and insisted upon by the Society. The Ratio is very explicit on this point,² and the Jesuit is eminently prepared to exert a deep and salutary influence upon his pupils, by the solid training he has received, the life of self-denial to which he has dedicated himself and the daily practice of prayer, meditation and self-examination. Strict supervision is the second feature of the Jesuit system of discipline. The Society is no follower of the happy-go-lucky doctrine of laissez-faire in moral education. Every Jesuit teacher considers it his sacred duty to watch over the conduct of those who have been committed to his charge, and, so far as possible, to guard them against the dangers which surround them. This does not mean, of course, that the boys are watched over at every moment, or that they are kept in the dark as to what surrounds them. They have liberty enough, within the limits dictated by their age and the conditions surrounding the institutions, and they receive abundant ethical instruction and advice from their confessors, in private conversations with their teachers, and in connection with the reading of authors. But the great means of moral education in the Jesuit schools, as in all Catholic schools, is religion and the various practices associated with it. Catholic educators consider religion as the one element of paramount importance in the curriculum. They believe that it is

founded on religion as in all Catholic schools.

² Reg. Com. Mag., cl. inf. 10.

¹ Schwickerath, R., Jesuit Education, p. 531.

the duty of the school to implant in the hearts of the young reverence and love for their Lord and Creator, and it is their firm conviction besides, that religion alone can supply the motives which, under all circumstances, may deter men from wrong-doing.¹ And that is why religion occupies such a prominent place in the school-system of the Jesuits.



St. Peter Canisius

Their pupils live in a thoroughly religious atmosphere. The church or chapel is always an integral part of the Jesuit college; each class-room has its crucifix and pictures of the Blessed Virgin and Saints; the school session begins and ends

¹ These are the more weighty reasons for the inclusion of religion in the school curriculum, but there are others, which it is not useless

perhaps to mention here.

As a science, religion is on a par with the highest of the branches of philosophy. Religion seems to be concerned only with our happiness in the life to come and yet, strange though it may seem, it also makes men happy in this world. Religion has an educative value which no other branch of study could claim. Reason is constantly called upon to understand dogmatic truth, and the very nature of this truth raises the mind to heights which human wisdom, unaided by Faith, has never reached. Imagination, strongly impressed by the beauty of the ritual and the admirable narratives of the Scriptures, is carried away into the sphere of the ideal. The feelings of love, pity, admiration, gratitude, particularly

with prayer and all students are strongly advised to hear Mass if possible every day, to approach the Sacraments frequently and to become members of one of the college sodalities. The catechism¹ is explained in all classes, and in the higher classes religious instruction takes the form of a course in apologetics. Even more important perhaps than this religious instruction at fixed hours, the whole teaching of the Society, from the lowest to the highest class, is permeated with religious principles for, as the first rule of the Ratio expresses it, the first and most sacred duty of the teacher is "to teach all branches of knowledge in such a manner that men should be led to the knowledge and love of their Creator and Redeemer."

the moral and religious sentiments, are constantly called into play and the fostering by religion of the appreciation of moral beauty is bound to develop delicacy and refinement of taste and tact. The will, spurred on and sustained by the highest motives, develops an

admirable power of self-control.

Sacred literature surpasses in wealth, and beauty, and grandeur the literature of any nation. "What drama would compare with the Passion of Christ? What lyrics with the Psalms?" Sacred history has been an inexhaustible source of inspiration for the painter, the sculptor and the poet; the moral beauty of its heroes is vastly superior to anything antiquity ever produced and it is the greatest subject in the whole field of historical science.

¹ Because of its small size, its low price and the simplicity of its lancause of its small size, its low price and the simplicity of its language, the catechism, though the most wonderful of little books, is seldom appreciated as it should be. "Few men prize this little book," writes Bishop Giraud of Rodez, in a pastoral letter, "and the world does not realize that its few pages contain the wisdom of the Lord, the wisdom of the Church, and the wisdom of the ages. Imagine this little book to have fallen into the hands of Socrates, Plato, or Aristotle. They would have been filled with awe and wonder and an indescribable joy at having their longing for knowledge so fully satisfied. Yes, they would have been happy, for this sudden light which had thus appeared to them is the teaching that solves our riddles, dispels our anxious doubts, removes our difficulties, and establishes a wonderful union between earth and Heaven, between time and eternity, between man and God. And all these results are accomplished by a few words, without any lengthy disquisition; and all truths are stated in such clear and transparent language that naught is needed for understanding them but the ears to listen and the heart to believe and love."-Quoted by Willmann-Kirsch, The Science of Education, Vol. II.

Two of the most widely-used catechisms in the sixteenth and following centuries were prepared by two Jesuits, Blessed Cardinal

Bellarmine and Saint Peter Canisius.

Educational Work of Missionaries. 1 At the time when some European nations were seceding from the Church, her missionaries brought new peoples into her fold. Most remarkable in this new field was the work of St. Francis Xavier,2 one In Asia. of the first companions of St. Ignatius when he founded his Order. In the brief space of ten years, from 1542 to 1552, this greatest of missionaries since the days of St. Paul visited many parts of India, the Malacca Peninsula, the Moluccas and Japan, founding churches, and converting the pagans by the hundreds of thousands. He was setting out for China, where he was also eager to preach the Gospel, when he died in the forty-sixth year of his life. The great work commenced by St. Francis Xavier was continued by a long succession of missionaries in India, Ceylon, Indo-China, the Philippines, Japan and China. Most prominent amongst those pioneers of western civilization in the East were the two celebrated Jesuits, Robert de Nobili³ and Matteo Ricci,⁴ who were not only zealous missionaries, but distinguished scholars. The first one, a nephew of Bl. Cardinal Bellarmine and a near kinsman of Pope Marcellus II, devoted his life to the conversion of the Brahmins in India; he has been declared "the first European Sanscrit scholar."5 Father Ricci, the first European sinologue,"6 landed in China with Father Ruggieri in 1583. By introducing the Chinese to the inventions of the West, by making them feel that they had something new and interesting to teach them in the secular branches, they gradually won the respect of the Chinese for the missionaries and their interest in the Christian religion. When Father Ricci died in 1610 there were already more than three hundred Christian churches established in

¹On this section, as on all sections directly pertaining to the activities of the Catholic Church, see any Catholic Church History such as Hergenroether's or the Catholic Encyc., which gives lists of references in connection with every article.
Monumenta Xaveriana (Madrid, 1899-1900).

^{*}Lettres édifiantes, Collection Martin, II, 263-266. *De Backer-Sommervogel, Bibliothèque des écrivains de la Compagnie

de Jésus, VI, 1792-95.

Max Müller, Lectures on the Science of Language, Vol. I, p. 174.

Dahlmann, F., Die Sprachkunde und die Missionen, p. 27.

China. To this intrepid missionary the Western World is indebted for the opening up of a vast empire to the Gospel, for the first breach in the Chinese distrust of foreigners and the first scientific knowledge the West received of the position of China, its language and literature, its customs, its religion and social organization. Father Adam Schall,1 one of the successors of Father Ricci at the head of the Chinese mission, became President of the "Mathematical Tribunal of China," in which position he was succeeded by Father Ferdinand Verbiest,2 whose great influence with the young Emperor of China secured adequate toleration for the Christians.

the Americas.

The work of evangelizing America began immediately after its discovery by Christopher Columbus in 1492. On their numerous voyages the Catholic explorers were accompanied by zealous missionaries, whose supreme ambition was to win to the Church the pagan nations of the New World, and who became their staunch and fearless defenders against the rapacity of the unprincipled adventurers who flocked to America from the Old World. "With great injustice," says the Protestant historian Robertson, "have many authors represented the intolerant spirit of the Roman Catholic religion, as the cause of exterminating the Americans, and have accused the Spanish ecclesiastics of animating their countrymen to the slaughter of that innocent people, as idolaters and enemies of God. The first missionaries who visited America were pious men. They early espoused the defense of the natives and vindicated their character from the aspersions of their conquerors, who, describing them as incapable of being formed to the offices of civil life, or of comprehending the doctrines of religion, contended that they were a subordinate race of men, on whom the hand of nature had set the mark of servitude. From the accounts which I have given of the humane and persevering zeal of the Spanish missioners, in protecting the helpless flock committed to their charge, they appear in a light which reflects

¹ De Backer-Sommervogel, Bibliothèque des écrivains de la Compagnie de Jésus, VII, 705-709. ² Ibid., VIII, 574-586.

lustre upon their function. They were ministers of peace, who endeavored to wrest the rod from the hand of oppressors. To their powerful interposition the Americans were indebted for every regulation tending to mitigate the rigor of their fate."¹

In another passage the same writer says: "The desolation of the New World should not then be charged on the court of Spain, or be considered as the effect of any system of policy adopted there. It ought to be imputed wholly to the indigent and often unprincipled adventurers whose fortune it was to be the conquerors and first planters of America, who, by measures no less inconsiderate than unjust, counteracted the edicts of their sovereign and have brought disgrace upon their country."²

The evangelization of Mexico, Central and South America, was chiefly the work of Spanish or Portuguese Franciscans, Dominicans and Jesuits, who vied with one another for the conversion and education of the natives. Before the end of the sixteenth century they had visited every part of that immense territory and established hundreds of missions, which became so many centers of Christian civilization. The beginnings of the Central and South American school systems also date from this early period. Before 1600 there had been founded universities in Mexico City (1551), Lima (1551), Santo Domingo (1558), Quito (1586) and Cuzco (1598), besides many colleges and hundreds of parish schools. The missionaries were ever anxious everywhere to unite secular learning with religious instruction. To the convents which they built were always attached schools and many others were founded by the bishops in their own dioceses, independently of religious Orders. In 1553, or less than half a century after its conquest by the Spaniards, Mexico alone had three colleges: one at Tlaltelolco for the Indians, San Juan de Letrán for the mestizos and another for the Spaniards and Creoles. The one at Tlaltelolco sent forth native governors, mayors and teachers

¹ Robertson, J., History of the Discovery of America, Bk. VIII.

² Ibid.

for the Indians. In 1575 the Augustinians founded their great college of San Pablo and shortly afterwards the Jesuits opened San Ildefonso in Mexico City.

The Paraguay Reductions.

A unique and most remarkable experiment in the field of missionary work and education was that conducted by the Jesuits in the famous Reductions in Paraguay. The vast territory, known by that name in the sixteenth century, was taken possession of by Spain in 1536 and the first attempts at reclaiming its fierce inhabitants were made shortly afterwards by the Franciscans, but with little results. The first Jesuits came into Paraguay in 1587, but the foundation of Reductions did not begin until 1609, with that of Loreto, followed by twelve others between that date and 1630, Altogether, before the suppression of the Society in 1773, the Jesuits founded approximately one hundred Reductions, the fruit of a century and a half of heroic labors and sacrifices. These Reductions, sometimes called Doctrinas, were established in order to obviate the evil consequences of the Spanish "encomienda system," by which the natives, whether subdued by force of arms or submitting voluntarily, became the slaves or the serfs of the conquerors and were compelled to work in the mines or on plantations. This barbarous, unchristian treatment of the natives, not only fostered among the latter a deep hatred for the conqueror and his religion, but it threatened with complete extinction a race unused to the hard labor of the mine or the farm. Time and again the clergy, both secular and regular, had protested against this violent oppression of the Indian, but all to no avail, when the Jesuits obtained from the Spanish government the emancipation of the Indians who would be converted to the Faith and the right to gather them in little communities or Reductions administered independently by the missionaries. In principle, all strangers were excluded from the territory of the Reduction, in order to protect the Indian against the danger of bad example from Spanish colonists;

¹ The literature on this subject is mostly Latin or Spanish or German; see Cunninghame Graham, A Vanished Arcadia.

however, when there was no fear of such a danger, friendly relations between Indian and Spanish settlers were established.

The administration of the parish was modelled on the Spanish pattern; its officers were elected every year, but their nomination had to receive the approval of the cura or pastor. Because of their isolation from the European settlements, the Reductions had to be economically self-supporting and their population must of necessity receive a complete industrial training; besides, the Jesuits considered labor as the first condition of a well-regulated life, the first guarantee of private and public morality. No one could remain idle. The women, in addition to their household duties, had to spin a certain amount weekly and to help during harvest time. The men were drafted into the various trade-guilds according to their talents, and those who followed no particular trade were to be employed on public works at least two days weekly. Children were taught to work from an early age. As soon as the child reached the age of seven, his native dispositions and talents were studied by the missionaries and officers of the parish and he was trained in that trade for which he seemed to be best fitted. Religion ruled the whole life of each community. Religious instruction was given daily for children, several times every week for catechumens, and on each Sunday for the whole parish. Each day's work began and ended with religious services for the whole community, but it was on Sundays and feast-days, particularly the feast of Corpus Christi, that the religious life of the Reduction found its fullest and most brilliant expression, through choir-singing, music, religious dances and processions, the exhibition of Mystery Plays and Miracle Plays. Each parish had its own religious societies and schools: an elementary school for the teaching of reading, writing and arithmetic, and a school for singing and music, which held a prominent position in the educational plan of the Reduction. More advanced instruction was given to the more promising boys. The Reductions reached their full development in the eighteenth century; their rapid decline and final disappearance

followed the suppression of the Society of Jesus in 1773.1

QUESTIONS FOR DISCUSSION

- 1. To what extent was the Catholic Revival influenced by the Protestant Revolution?
- 2. Account for the delay in the adoption of the Gregorian reform of the calendar in England, in Russia.

3. The Society of Jesus was not founded primarily to combat Protestantism. Discuss.

4. The Jesuits have been accused of neglecting the education of the masses. What is the answer to be made to this accusation?

5. Compare the Jesuit system of instruction, beginning with the languages, followed by the study of the sciences and culminating in that of philosophy, with the modern system of parallel instruction in language and science. Which is better psychologically?

6. Every teaching congregation is, ipso facto, a normal school. Explain.

7. What are, according to you, the essential qualifications of a good teacher? Which of these is emphasized in the preparation of the religious teacher? Comment.

8. The Catholic missionary is an educator in the best sense of the term. Comment.

9. Account for the fact that the Indian population has survived in Central and South America,

10. Happiness, not wealth, was the aim of the Jesuits in the government of their Reductions. Comment,

SOURCES

De Backer-Sommervogel, Bibliothèque des écrivains de la Compagnie de Jésus.

Hefele Hergenröther, Konzilien Geschichte,

Heimbucher, M., Die Orden und Kongregationen der katholischen Kirche.

Monumenta Historica Societatis Jesu.

Pachtler, G. M., Ratio Studiorum et Institutiones Scholasticæ Societatis Jesu, in Monumenta Germaniæ Pedagogica.

Waterworth, J., Decrees and Canons of the Council of Trent.

¹ Violently attacked and slandered by the enemies of the Jesuits in the seventeenth and eighteenth centuries, the Reduction system has since received unstinted praise from men of the most divergent callings and denominations. Cunninghame Graham says of it (loc. cit., p. 211): "That it was not only suitable, but perhaps the best that under all the circumstances could have been devised for Indian tribes two hundred years ago, and then just emerged from semi-nomadism, is, I think, clear, when one remembers in what state of misery and despair the Indians of the "encomiendas" and the "unitas" passed their lives."

REFERENCES

Baumgartner, A., Geschichte der Weltliteratur. Birkhæuser, J. A., History of the Church. De Rochemonteix, C., Un Collège de Jésuites aux XVII et XVIII

Hergenröther, J., Handbuch der allgemeinen Kirchengeschichte. Hughes, F., Loyola and the Educational System of the Jesuits. Pastor, L., The History of the Popes. Paulsen, F., German Universities. Schwickerath, R., Jesuit Education.



A SCHOOLMASTER

CHAPTER VII

BEGINNINGS IN THE UNITED STATES



N the South. In northern as in central and southern America, the history of the beginning of Christian education is that of the first explorations and missions, and it forms one of the most fascinating chapters in the annals of Christianity.

The pioneers of education

in Florida.

A brief recital of the more important events is all that can be attempted here. The first endeavor to christianize the natives in what is now the territory of the United States was made by the Franciscans who accompanied the exploring expedition of Narvaez in 1529. This expedition failed, and with it the religious enterprise. The attempt was repeated by the Dominicans in 1549, and again in 1553 and 1559. In 1565, with the founding of St. Augustine, the Florida missions were resumed once more by the Franciscans, assisted by other religious Orders, but again proving ineffectual, they were abandoned. Finally, a new attempt, made in 1601, proved more successful. The natives were converted in large numbers and gathered in Reductions under the direction of the Franciscans. These Reductions continued in a flourishing condition until the beginning of the eighteenth century, when they were repeatedly ravaged by raids from the neighboring English colonies. With the cession of Florida to England in 1763, the missionaries had to leave the country, the Reductions were broken up and the Indians wandered back to their thick, green everglades.

Though the Mississippi River had been discovered in 1541 by the Spaniard, Fernando de Soto, European settlements and missions for the Indians were not established along that river until a century and a half later, after the Mississippi had

been rediscovered by the saintly missionary, Jacques Marquette, the Canadian trader, Louis Joliet, and the Norman explorer, Robert Cavelier de La Salle. The latter took pos- the Mississippi session of the vast territory watered by the Mississippi and its tributaries in the name of Louis XIV and called it Louisiana, in honor of that king. The first permanent settlement was established in 1699; in 1711 the city of Mobile was founded and in 1718 New Orleans, where nine years later the Ursulines founded what was probably the first academy for girls in the present territory of the United States.

Texas was visited by a Franciscan missionary in 1544, but it was only at the close of the seventeenth century that permanent missions were established, through the founding, by the Franciscans, of Reductions in various parts of that vast territory. Several attempts to found missions among the Pueblos of New Mexico were made by the Franciscans in the sixteenth century, the first one taking place in 1539, but all to no avail: the missionaries perished in their work of zeal. In 1597 a new band of Franciscans entered New Mexico, this time to conquer. By 1608 they had baptized eight thousand of the natives and founded several elementary schools for their children.

In the West. Lower California had been discovered by Fernando Cortez as early as 1535, but the sterility of the soil California, and still more the hostility of the natives, who proved to be on the lowest plane of humanity, prevented, for a long time, the establishment of any permanent mission. Towards the close of the seventeenth century, the Jesuits entered this most unpromising field of apostolic labor. Notwithstanding almost insuperable obstacles, they succeeded in establishing a chain of Reductions, numbering fourteen, when the missionaries were expelled from the country by the brutal decree of the Spanish government in 1768. Upper California, the present State of California, had been discovered and explored by Juan Rodriguez Cabrillo in 1542, but no permanent mission was founded till the celebrated Franciscan, Junipero Serra, and his com-

panions began their work there in 1769. From that year till 1823 a score of missions, somewhat after the plan of the Paraguay Reductions, were established in upper California; San Diego was the first, and San Francisco the last of these foundations. Once baptized, the Indians lived in the mission village, under the supervision of the padre, who considered himself, as regards his community, in loco parentis, and it was in that light that the Indians looked to him. Religion was, of course, the mainstay of private and community life in each village, but from the very beginning of every Reduction the missionaries insisted on well-regulated labor as a means of weaning the Indians from their natural indolence, and transforming these children of the wilderness into civilized men and women. Besides, it was part of the plan of the missionaries to make of their establishments self-supporting communities that would become, as soon as possible, independent of assistance from the Spanish Government. All had to work according to their capacity for six or seven hours a day, either on the farm or in the workshops and the missionaries themselves, "for the sake of example, never disdained to labor like the Indians." To these missionaries, California is indebted for the introduction of grain, of the fruits which have made its name famous and for various kinds of domesticated animals, all of which were brought up from Mexico. Apart from religious education and the moral preparation that naturally goes with it, the training which the natives received in the missions was essentially industrial, but school education was not neglected, though the Indians, as a rule, showed a decided aversion for study. There was given, in each parish, instruction in reading, writing and arithmetic for such boys as showed a real disposition for book-learning.

In the North. The first permanent settlement in the North was that founded in 1604 at Port Royal, now called Annapolis, in Nova Scotia, and four years later two Jesuits began a mission among the natives of Acadia, which then in-

cluded Nova Scotia, New Brunswick and Maine. In 1612 they in the North. founded the mission settlement of St. Saviour, among the Abnaki Indians of Maine. Destroyed by the English shortly afterwards, the mission was reopened in 1646 and, though constantly harassed by the Puritans of New England, it continued to prosper until the beginning of the eighteenth century.

The site of Quebec was selected by Champlain in 1608; in 1635 the Jesuits founded a college there, the first one to be established on this side of the Rio Grande; four years later, Nursing Sisters came to Quebec from France to take charge of the Hôtel Dieu, or hospital, which the liberality of a niece of Richelieu, the Duchesse d'Aiguillon, had endowed, and a little band of Ursulines, under Marie de l'Incarnation, opened the first school for the education of girls in northern America. In 1642 Paul Chomody de Maison Neuve founded Ville Marie, as Montreal was first called, and in 1653 he invited Marguerite Bourgeois to come to Canada to teach. With four companions, she opened her first school in 1657. Then and there was founded the first American teaching congregation of women, the congregation of Notre Dame of Montreal. Before the end of the seventeenth century, the new Order had opened a number of schools for the daughters of the French settlers and missions for Indian girls. Since then it has spread to all the provinces of eastern Canada and in the United States. It counts to-day over fifteen hundred members giving instruction to thousands of girls and young ladies in elementary, commercial, academic and collegiate institutions.

Meanwhile, the Jesuits had continued their apostolic labors among the Indians, traversing the country in every direction, not only in Canada, but in what is now United States territory, in order to secure the conversion of the natives. Of those who labored in this part of the American continent, the following, who won the crown of martyrdom and were beatified in 1925, deserve a special mention: Isaac Jogues, Jean De Brebeuf, Gabriel Lalemant, Charles Garnier, Antoine Daniel, Noël Chabanel, René Goupil, and Jean De Lalande. After

being tortured with devilish refinement, they were put to death by the Iroquois. Even these sanguinary Iroquois at last were converted to the faith. The very village of Gandawague, now Auriesville, in which Father Jogues had been martyred, became the center of the Iroquois mission, and when the missionaries were expelled by the English, the Catholic Iroquois left New York and founded a new settlement near Montreal. But the efforts of the Jesuits were not limited to the East; from their central house in Quebec, they went forth to the discovery and spiritual conquest of the immense territory lying west of the St. Lawrence. "The history of their labors," says Bancroft, "is connected with the origin of every celebrated town in the annals of French America." As early as 1641 they had visited the falls of St. Mary. In 1665 Father Claude Allouez, the "Apostle of the West," began his thirty-year career as a missionary among the Indians of Michigan, Wisconsin and Illinois. His chief aides in this great field were Fathers Claude Dablon and Jacques Marquette. It was from the new mission of St. Ignace, which he had founded in the Isle of Mackinaw in Lake Michigan, that Father Marquette, accompanied by Joliet and five other Frenchmen, started in two canoes on the expedition, which has immortalized his name. Skirting the northern and western shores of Lake Michigan, the explorers entered Green Bay, then the Fox River, from which they reached the Wisconsin and Mississippi. They descended this river as far down as the mouth of the Arkansas, and there learned with certainty from the Indians that the river they had discovered flowed into the Gulf of Mexico. They returned to Green Bay by way of the Illinois and Lake Michigan. Marquette's diary of this epoch-making expedition is one of the most important and most interesting documents of American history.

¹ See The Jesuit Relations and Allied Documents, edited by Reuben Gold Thwaites, Secretary of the State Historical Society of Wisconsin, in 73 volumes. A volume of Selections from these Relations, including the Marquette manuscripts, has been published by Edna Kenton.

In the East. With the exception of Maryland, the early Social and European settlements on the Atlantic seaboard, from Georgia differences to Maine, were made by Protestants, who came, most of them, among the to America in order to found new homes and organize communities in which they could enjoy the freedom denied them in the land of their birth, and bring up their children according to their own religious and political principles. New England was settled by English Puritans, Manhattan Island and the Hudson Valley by Dutch and Walloon Calvinists. Swedish Lutherans settled along the Delaware, and French Huguenots on the coast of the Carolinas. English Quakers, Baptists and Methodists, Swedish and German Lutherans, Moravians, Mennonites and other Protestants coming from Germany colonized Pennsylvania, while New Jersey, owing to its central position, received an overflow of the neighboring Dutch, German, English and Swedish colonies, Maryland was founded as a colony for persecuted English Catholics, while the South, and later New York, were colonized by Anglicans, or adherents of the National English Church. These early American colonists differed, not only in racial stock and religious creed, but also in their political opinions and the social class to which they belonged. The German, Dutch and Swedish settlers came mostly from the poorer class of peasants, whereas many of the English and French colonists belonged to the middle class and nobility, and while there was a strong republican spirit in the Calvinistic colonies of the North, the South was, on the whole, rather inclined to uphold the prerogatives of the English crown.

This diversity in racial and social origins, religious and political opinions, explains the differences to be noted later in the attitude of the American States towards education. By reflected the middle of the eighteenth century, there were distinguishable three such attitudes, which may be characterized as the policy. northern, central and southern conceptions of education. Massachusetts might be taken as typical of the first. Pennsylvania of the second and Virginia of the third.

colonists

Virginia,

The Virginia or southern pioneers were mostly yeomen or country squires who adhered to the English Established Church. They had come to America, not to make new homes, but as adventurers in search of gain, in a country which had been described as glittering with gold, and it was only after many failures to find the object of their quest that they finally settled down as planters. This type of settlement, which called for the use of a large number of white servants, replaced later by negro slaves, led to a sharp differentiation between employers and employees, which was not likely to promote a democratic system of education. In fact, the first general provision for elementary education made by Virginia occurred in 1818. Prior to that date, Virginia legislation relating to education is concerned with the College of William and Mary or with the poor and orphans, their apprenticing to some master and the obligation of the colonial and local authorities in the matter,² much after the custom of the mother country.³ Apart from this industrial training, the lower classes were left to take advantage of such charity schools4 as might chance to exist in the locality. This attitude of the upper class towards the education of the masses is fairly well reflected in a pronouncement of Governor Berkeley on the subject. Replying to a question on the condition of education in the colony, he said: "The same course that is taken in England out of towns: every man, according to his ability, instructing his children but, I thank God, there are no free schools nor printing, and I hope we shall not have these hundred years; for learning has brought disobedience and heresy and sect into the world and printing has divulged them in libels against the

¹ See Hening, W. W., The Statutes-at-large of Virginia.

² This apprenticing of boys to a trade was an old mediæval custom; it became compulsory in post-Reformation days for the children of the poor. Such children were sent to the work-house, the so-called "school of industry," or were indentured to a master.

⁸ See p. 105.

⁴ Established by Anglican societies chiefly for religious purposes. The first one was founded in Whitechapel in London in 1680. Many others followed both in England and the Colonies.

best government. God keep us from both." The children of the well-to-do were either educated at home by a tutor or in some private pay-school, or sent to England, and their opportunities for education were still more increased in 1693 by the foundation of William and Mary College. As remarked before, the condition of education in Virginia was typical of the South. In the Carolinas and Georgia, which were colonized at a much later date than Virginia, we find the same policy of laissez-faire, the same tendency to follow the "laudable custom of the Kingdom of England," to interfere officially as little as possible with the education of the masses.

Maryland has the glorious distinction of being the first of the American colonies to recognize religious freedom by her Toleration Act of 1649. "This act fulfilled Baltimore's pledge of religious freedom. The assembly which passed this Act had a plurality of Catholics and thus 'in an age of cruelty. like true men with heroic hearts, they fought the first great battle of religious liberty." The pioneers of Christian education in the colony were the Jesuits who had answered Lord Baltimore's call "to attend the Catholic planters and settlers and to convert the native Indians."3 The labors of the missionaries among the latter were, from the very beginning. crowned with great success, but they were interrupted in 1645 by the English Civil War4 and were not resumed until several years later. As early as 1640 the Jesuits had opened a parish elementary school, with Ralph Crouche, a former novice, as schoolmaster; other parish schools followed, and in 1677 they opened at Newtown what was the second college in the present territory of the United States, Harvard having preceded it by forty-one years. The college prospered until 1688, when the English Revolution⁵ ushered in a period of perse-

Marvland

¹ Hening, op. cit., Vol. II, p. 517.

² Historical Records and Studies, Vol. XIV, p. 186.

⁸ Ibid., p. 184.

⁴ Between Charles I and his Parliament, ending in Cromwell's Protectorate, followed a few years later by the restoration of the Stuarts.

⁵ Resulting in the accession of the Protestant William and Mary.

cution which lasted up to the eve of the American War of Independence. The Toleration Act was repealed, Catholics were denied the suffrage, their schools were closed and they were forbidden to teach in the colony. Maryland's educational policy became practically the same as that of Virginia.

Delaware,

The first permanent settlement in Delaware was made around 1640, near Wilmington, by the Swedes, who also founded the first European colony in Pennsylvania, a few miles from Philadelphia. Their ministers, not uncommonly, were the parish schoolmasters and the ability to read seems to have been quite common among these colonists by the end of the seventeenth century. Dutch settlers also crossed to Delaware from New Amsterdam and they opened their own schools, but as the English came in ever-increasing numbers, English gradually superseded Swedish and Dutch in the colony and its schools.²

Pennsylvania,

When William Penn obtained from Charles II a grant of the land lying west of the Delaware, his intention was to establish there a refuge for his Quaker brethren, who were bitterly persecuted in England. They at once came to Pennsylvania in large numbers and the freedom of religious worship, which was recognized in the new colony, attracted other Protestant sects: Baptists, Methodists, Moravians, German Lutherans and others who came to Pennsylvania to enjoy greater religious liberty than they were granted at home. The second legislative Assembly of Pennsylvania, which met in 1683, enacted a school law providing that all who had charge of children "shall cause such to be instructed in reading and writing, so that they may be able to read the Scriptures and to write by the time they attain to twelve years of age; and that then they be taught some trade or skill."3 All those who neglected to comply with those provisions were to be fined five pounds for each

¹ Shea, G., The Catholic Church in the United States, Vol. I, p. 358. 2 In this, as in other colonies, the Anglican Society for the Propagation of the Gospel (S. P. G.) was very active in promoting the cause of education.

⁸ Wickersham, J. P., History of Education in Pennsylvania, p. 39.

neglected child. The court records show that the law was enforced here and there, but it was later vetoed by William and Mary as opposed to English customs, and though re-enacted in 1693, it remained a dead letter. Instead of some kind of public schools, we find in Pennsylvania, during the eighteenth and the beginning of the nineteenth centuries, private pay-schools and parish schools conducted by each congregation in its own language and for its own religious purposes. The extent to which instruction was, in this way, provided for those who could not afford to pay fees, varied, of course, from one congregation to the other. The German Lutherans, the Quakers and Moravians seem to have taken a particular interest in schools. It has been claimed by the first, who constituted about one-fourth of the population, that there was a parish school in each one of their communities. Some of the schools conducted by the Moravians were among the best in the country, attracting pupils from distant places in other colonies. The famous William Penn Charter School of Philadelphia had its origin during this early period. It was founded in 1689 as the Friends' Public School and it was open to all, irrespective of class or sex, and admitted free of charge those who were unable to pay. In 1756, thanks to the initiative of Benjamin Franklin, there was opened in Philadelphia an academy composed of three schools: the Latin, the English and the Mathematical. Charters were granted to the academy in 1754 and 1755, in which the institution is referred to as the "College, Academy and Charitable School of Pennsylvania." Its curriculum, far more liberal than that of any other American college before the Revolution, shows clearly the influence of Franklin's interest in the sciences. In addition to the traditional studies in the classics and philosophy, it included courses in mathematics, which occupied a prominent place in the work of the school, chemistry, hydrostatics, prismatics, optics, politics, natural and civil law. In 1765 a medical department, the first one to be established in this country, was annexed to the college.

New Jersey

The early settlers of New Jersey came mostly from the neighboring colonies: Dutch Calvinists from across the Hudson in New Amsterdam, English Puritans from the New Haven Colony, Swedish Lutherans from Delaware, Scotch-Irish Presbyterians, German Lutherans and English Quakers from Pennsylvania, all bringing with them their own language, religious creeds and conceptions of education. With the passing of New Amsterdam under English rule, Dutch influence, which had been predominant, waned in New Jersey; the English language and English customs gradually gained the supremacy. Little school legislation was enacted in eastern or western Jersey, and none at all, until the Revolution, after the two provinces had been united and placed under the governor of New York. What schools existed there were of a voluntary character; most of them were elementary confessional schools. but some, like that of William Tennent at Neshameny, were grammar schools. Princeton College received its charter in 1748, but did not secure its present location until 1752. Rutgers College at New Brunswick, first known as Queen's College, received its charter in 1766. It was first intended as a fitting school for the ministry of the Dutch Reformed Church. whereas Princeton was to perform the same function for the Presbyterian denomination.

and New York. New Amsterdam, as New York was first known, claims the distinction of having possessed the first school established in the thirteen American Colonies. That was the private elementary school founded in 1633, with Adam Roelandsen as first schoolmaster, some twenty years after the first settlement on Manhattan Island. The first reference to education at public expense is found in a series of laws enacted in 1638, one of which reads as follows: "Each householder and inhabitant shall bear such tax and public charge as shall hereafter be considered proper for the maintenance of clergymen, comforters for the sick, schoolmasters, and such like necessary officers." Mention is also made in these early colonial days of

¹ O'Callaghan, E. B., New York Colonial Documents, I, p. 212.



NASSAU HALL, PRINCETON

a second private school founded and conducted by one Jan Stevensen, and as the colony grew in numbers and wealth, it is most likely that other private schools were founded. Usually, however, the official records are silent on such schools; what they refer to, when they mention a school, is a public institution, under the management and supervision of a board of deacons. The town schoolmaster, it appears, was a very busy person in these early colonial days. A contract drawn in 1682 with a schoolmaster in Flatbush states, in addition to his duties as a teacher, that "he shall keep the church clean and ring the bell three times before the people assemble to attend the preaching and catechism. For the administration of Holy Baptism, he shall provide a basin with water, for which he shall be entitled to receive from the parents, or witnesses, twelve styvers. He shall, at the expense of the church, provide bread and wine, for the celebration of the Holy Supper. He shall give the funeral invitations, dig the grave, and toll the bell, for which service he shall receive for a person of fifteen years and upwards twelve guilders, and for one under that age, eight guilders."2 He also agreed to act as reader and precentor of the congregation and messenger for the consistory.

Besides receiving a fixed salary from the community, together sometimes with the use of a house and garden, the public school teachers were entitled to fees from the pupils whose parents could afford it, a practice which, in some European countries, remained in use until late in the last century. The learning of prayers and the Dutch catechism, together with instruction in reading and writing the Dutch language, and sometimes a little arithmetic, formed the usual curriculum of the schools of the New Netherlands. These schools were for boys and girls alike, the latter sitting apart and reciting in separate classes. In 1659 a Latin school was also founded

pp. 65-67.

¹ It is to be noted, however, that even private teachers had to be licensed by the civil and ecclesiastical authorities.
² Annals of Public Education in the State of New York, 1626-1746,

in New York, one of the first to be opened in the colonies. At least thirty teachers, some public, some private, are on record as having taught in the New Netherlands before the final English occupancy, a worthy showing if we consider that the colony was under Dutch rule for a few decades only and that when that rule ceased the population was still very limited.

After the Dutch occupation of New York had come to an end, the Dutch schools gradually disappeared, but the new rulers were slow in setting up their own. With the exception of an unsuccessful attempt to found a public school in the early part of the eighteenth century, elementary education was provided on a tuition basis or from charity funds; all schools were under Church control and this plan remained in force until the beginning of the nineteenth century. In 1754 a charter incorporating "the governors of the College of the Province of New York in the City of New York" and providing for the foundation of King's College, to-day Columbia University, was granted by George II. The first class met in the vestry room of Trinity Church, the whole faculty consisting of the President. A few years later the college was removed to the building which it was to occupy for more than a century and which was situated on a tract of land bounded by Church, Barclay and Murray Streets, at that time "in the skirts of the city." The announcement of the opening of the college states the following as the entrance requirements: "That they [the candidates] be able to read well and write a good legible Hand and that they be well versed in the first five rules in Arithmetic and as to Latin and Greek that they have a good knowledge of the Grammars of Tully and of the first books of Vergil's Æneid and some of the first Chapters of the Gospel of St. John in Greek." From the same announcement we learn that "It is further the Design of this College to instruct and perfect the youth in the learned languages and in the Arts of Reasoning exactly, of Writing correctly and Speaking eloquently, and in the Arts of Numbering and Measuring, of Surveying and Navigation, of Geography and History, of Husbandry, Commerce and Government: And in the Knowledge of all Nature in the Heavens above us and in the Air, Water and Earth around us" The ultimate purpose of all instruction in the new college is thus set forth: "To teach and engage the Children to know God in Jesus Christ, and to love and serve Him in all Sobriety, Godliness, and Richness of Life, with a perfect Heart and a willing Mind." 1

As we have seen before, the Reformation left the Church of England nearer to the Catholic Church than any other Protestant sect; Anglicanism retained many of the Catholic teachings and practices. With the spread of Calvinistic ideas, a large number of the clergy and people in England became dissatisfied with what they considered a half-way policy on the part of the national Church, and they called for a purification (whence the name Puritans) from the old doctrines and observances. Puritans at first had no thought of seceding; they still believed in a national Church and in the religious supremacy of the king or queen, but they insisted upon a simplification of the forms of worship and the introduction of more preaching into the service. The refusal of the Government to comply with their wishes led some of them to question its authority in religious matters and to assert that any body of Christians might constitute themselves into a Church independent of all external authority. They separated themselves from the Established Church and for that reason they were called Separatists or Independents. They were savagely persecuted by Elizabeth and James I and many fled from England. One of their congregations was at Scrooby, in the east of England. In 1608 they fled to Holland and after living for twelve years at Levden, these Pilgrims finally set sail to America and landed at Plymouth. Other congregations of Puritans soon followed, and long before the end of the seventeenth century the southern part of the New England coast was dotted with little self-

The Puritans

¹ New York Mercury for May 31, 1754, quoted by Dexter, E. G., A History of Education in the United States, pp. 253 ff.

governing communities, modelled after the city-state founded at Geneva by Calvin. A common Court or Legislature in which each one of them was represented bound together these little republics.

The confessional religious motive of education, which we have seen at work in the other Protestant settlements on the Atlantic coast, prompted the New England Puritans at an system of early date to found grammar schools and a college. Since the State-Church control schools of England were closed to their denomination, they of schools. could hope to perpetuate their own faith and clergy and continue to have magistrates, lawyers, physicians and teachers of their own persuasion, only through their own schools. In 1635, or five years after the first settlement in Boston and fifteen years after the first landing at Plymouth, the Boston Latin school was founded. It was the first one of its kind to be established in the United States and it has had a continuous existence since its foundation. One of its early teachers was the famous Ezekiel Cheever, whose Accidence, a book for beginners in Latin, was the first widely-used text-book by a New England colonist. The example of Boston was followed by Charlestown in 1636, by Dorchester in 1639, and before the end of the seventeenth century by many other towns in the New England Colonies. These schools prepared boys for entrance at Harvard, which was founded in 1636, "to advance Learning and perpetuate it to Posterity, dreading to leave an illiterate Ministery to the Churches when our present Ministers shall lie in the dust." The new college, founded by the General Court [Legislature] of the Massachusetts Bay Colony, was located at Newton, which was rechristened Cambridge, in memory of the English University, where many of the early colonists had studied; the college itself received its name from that of its first benefactor, John Harvard (1607-1638), who bequeathed to it his library and one-half of his property. Yale received its first charter in 1701, but did not secure its per-

¹ From a pamphlet published in London in 1643. Mass. Hist, Col., Vol. I, pp. 242-246.

manent home in New Haven until 1717. It received its name from Elihu Yale, one of its early benefactors, who was induced to come to the aid of the hard-pressed institution through the famous Cotton Mather, at one time President of Harvard. Brown was founded in 1764 by the Baptist Association of Philadelphia, for the benefit of students of their denomination who met, it seems, difficulties in most American colleges. The college, first located at Warren, was removed to Providence in 1770. Its name is a reminder of Nicholas Brown, the first of its great benefactors. Dartmouth, the last one of the American colleges to be founded before the Revolution, grew out of a school for Indians opened in 1754 in Lebanon, Connecticut, by Rev. Eleazer Wheelock. It was known as Moore's Indian Charity School from the name of a benefactor. In 1770, after receiving a college charter, the school was removed to Hanover, New Hampshire, and christened Dartmouth College in recognition of the aid it had received from Lord Dartmouth. In most particulars, the American Colonial colleges resembled their English prototypes. The admission requirements called for the satisfactory completion of the Latin grammar school course, and their curriculum included the traditional studies in the classics, philosophy, mathematics, with a tendency in the late foundations to introduce a little more science. Since many of the students were prospective ministers, there was much reading of the Scriptures, and the study of the Oriental languages, particularly Hebrew, received some attention.

Elementary education among the early New England settlers was first provided for in the home, as was the custom among the English Puritans. Later, elementary schools under a master were established by the towns, and many women also opened schools, the so-called "Dame Schools," which were conducted as small financial ventures. As in Virginia and the other English Colonies, the regulations concerning the apprenticing of poor boys and orphans were in force, the masters being held responsible for the instruction of their apprentices. The support of the town schools, whether elementary or gram-



mar schools, came from various sources: tuition fees, bequests, income from town-lands, town-taxes. Towards the close of the colonial period, there appeared a new type of school, the academy, which was to supplant the declining grammar school. The first academy seems to have been that founded in 1753 at Philadelphia, through the efforts of Benjamin Franklin. Germantown Academy, or Union School, was founded in 1761, and similar schools were later established in other Pennsylvania towns. Dummer Academy, at Byfield, Massachusetts, whose history begins in 1761, has been called the "mother of the New England Academy." The full development of this new type of school in America belongs to the early nineteenth century and it will be treated later.

The real importance of the history of the beginnings of education in New England lies in a series of laws, which were enacted as a remedy for the negligence of many parents and masters in the education of their children or charges. The principles embodied in these laws were to be adopted later as a basis for the American educational policy. The first of these laws was the Massachusetts law of 1642, which, "taking into consideration the great neglect of many parents and masters in training up their children in learning and labor, and other employments which may be profitable to the commonwealth," directed that there be appointed "chosen men" in every town for the "redress of this evil." This law having proved ineffectual, the General Court [Legislature] enacted a second one in 1647, ordering:

"That every towneship in this jurisdiction, after the Lord hath increased them number to 50 householders, shall then forthwith appoint one within their towne to teach all such children as shall resort to him to write and reade, whose wages shall be paid either by the parents or masters of such children, or by the inhabitants in general [and] that where any towne shall increase to the number of 100 families or householders, they shall set up a grammar schoole, the master thereof being able to instruct youth so farr as they shall be fited for the

¹ Records of the Governor and Company of the Massachusetts Bay in New England, Vol. II, pp. 6-7.

university, provided, that if any towne neglect the performance hereof above one yeare, that every such towne shall pay 5£ to the next schoole till they shall performe this order."1

These laws applied not only to the present State of Massachusetts, but to Maine, Vermont and New Hampshire, then a part of the Massachusetts Colony. New Haven, Connecticut and Plymouth soon followed the lead of Massachusetts, whereas in the Rhode Island and Providence Plantations, which had been founded by refugees fleeing from religious persecution in New England and elsewhere, non-interference from either Church or State became the educational policy for two hundred years.

QUESTIONS FOR DISCUSSION

1. What principles are involved in the Massachusetts school laws of 1642 and 1647?

2. To what extent are these principles ethically sound?

Compare the present-day American educational policy with that of the New England colonies.

4. What departure from the homeland practice is noticeable in the educational practice of the American colonies?

5. Contrast the various types of educational practice in the American Colonies. 6. To what extent could it be said that the schools established in the

colonies in the seventeenth and eighteenth centuries were American schools?

7. Contrast curriculum and aim of any one of the early American colleges in the eighteenth century and now.

8. Show the influence of the Renaissance on American education.
9. Show the influence of the Reformation on American education.

10. Of all the schools founded in America in pre-Revolution days, which one comes nearest to the present types?

SOURCES

In general: The statutes, court records, minutes of council, for each colony, the charters, rules and regulations of colleges and schools.

In particular:

Adams, H. G., Contributions to American Educational History (United States Bureau of Education).

Barnard, H., American Journal of Education.

Clews, E. W., Educational Legislation and Administration of the Colonial Governments.

¹ Ibid., p. 203.

Hening, W. W., The Statutes-at-large of Virginia. Hinsdale, B. A., Documents Illustrative of American Educational History (Report of the U. S. Commissioner of Education, 1892-1893), pp. 1225-1414.

REFERENCES

Boone, R. G., Education in the United States.
Burns, J. A., The Catholic School System in the United States.
Brown, E. E., The Making of Our Schools.
Dexter, E. G., A History of Education in the United States.
Heatwole, C. J., A History of Education in Virginia.
Kilpatrick, W. H., The Dutch Schools of New Netherlands and Colonial New York.

Martin, G. H., Evolution of the Massachusetts Public School System. Monroe, P., and Kilpatrick, W. H., Colonial Schools (Monroe Cyclopedia of Education).

Wickersham, J. P., History of Education in Pennsylvania.



CHAPTER VIII

THE SCIENTIFIC MOVEMENT



EFORE the Sixteenth Century. As we had occasion to remark before, the awakening of the modern scientific spirit and the beginnings of modern scientific inquiry were contemporaneous with the Revival of Learning in the fourteenth and fifteenth centuries. The reading of the new-

ly-recovered scientific works of antiquity aroused in Renaissance scholars a keen interest in the direct observation of natural phenomena and in experimentation, and this, in turn, led to the geographical and astronomical discoveries, the mathematical, physical and biological investigations, which have revolutionized industrial life and deeply influenced educational ideals and practices. While a full presentation of the modern scientific movement and its meaning does not belong to the history of education, a brief historical sketch of what modern science owes to the preceding ages, of scientific progress in the last three centuries and its influence on modern thought life, will help us to form a correct estimate of the new educational theories and subsequent changes in school work, which will be treated later.

The Greeks had made remarkable progress in many sciences.¹ Many of their philosophers were also mathematicians of note. In fact, they looked upon the study of mathematics

The contributions to mathematics by the Greeks

¹ The Greeks owed much to Babylonia and Egypt, but their own achievements and, still more, the spirit in which they were made, laid the foundation of European science. Rome contributed little in the domain of pure science. Her genius was essentially of a practical character; she produced remarkable jurists, organizers, engineers, but never showed a decided tendency towards theoretical discussion, or scientific speculation.

as an introduction to that of philosophy. Thales and Pythagoras, who lived in the sixth century before Christ, Plato (B. C. 420-348), Archimedes (B. C. 287-212), Apollonius of Perga (c. 250 B. C.), to mention only the leading names, made important contributions to geometry. Archimedes bequeathed to the following generations not only many new theorems, but the method of "exhaustion," which he had applied so successfully in his study of several curves.² Apollonius, surnamed the "ideal geometer," wrote a treatise on Conics in eight books. seven of which have reached us. Euclid, who taught at Alexandria in the third century before the Christian era, composed there his Elements of Geometry in thirteen books. The first six books deal with plane geometry, the next four with the properties of numbers, and the last three with planes and solid geometry. The early Middle Ages were acquainted with part of these Elements through Bœthius's work on the subject;3 a fuller knowledge of geometry came to the western schools in the twelfth century, through translations from the Arabic made by the Schoolmen who went to Spain in order to become acquainted with Saracen learning.4 Nevertheless, many of the Greek discoveries in the field of geometry were not recovered until the Renaissance, and some, even in comparatively recent times.5

were partly known in the Middle Ages.

The Greek contributions to the science of arithmetic were chiefly of a speculative character. They were more interested in discussions on the properties of numbers than in their practical applications. Besides, their cumbersome system of notation (and that is true of the Roman system as well) precluded any rapid advance in that science.⁶ It was mainly arithmetic

² Relatively no less important was Archimedes' pioneer work in physics and mechanics,

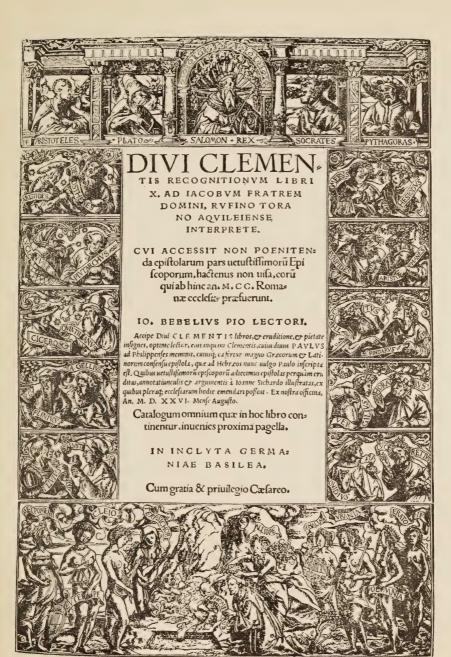
¹ It determines, e. g., the circumference and area of a circle by inscribing and circumscribing polygons, which differ less and less in boundary and area from the circle.

⁸ See Vol. I, p. 84.

⁴ Ibid., p. 165.

⁵ See Sedgwick-Tyler, A Short History of Science, Chapter VI.

⁶ See Gow, J., History of Greek Mathematics, Chapter III.



TITLE PAGE OF DIVI CLEMENTIS, SHOWING SIXTEENTH CENTURY INTERPRETATION OF HISTORICAL CHARACTERS

of this speculative type, with its applications to the Church calendar which was taught in the mediæval schools. Gerbert (940-1003), who became Pope Sylvester II,1 and who studied for some time in the Mohammedan schools of Spain, is said to have brought back the Arabic notation with him, but its use did not become general until a much later period. The first symptoms of algebra appear in that part of Euclid's Elements, which is called Arithmetic, and it is most likely that algebraic principles were familiar to Archimedes and Apollonius, but the first Greek mathematician to compose a treatise on algebra was Diophantus of Alexandria (c. 350). Only the first six books of his work have reached us. They contain the solutions of a large number of problems depending on equations of the first and second degrees. The only sign used by Diophantus is that of subtraction. In referring to other operations he uses circumlocutions. The Hindus also made important contributions to arithmetic and algebra, but their influence upon European science was exerted through the Arabs, who, besides, transmitted to the Western World part of the Greek discoveries in mathematics and astronomy.2

The contributions of the Hindus and Arabs.

The Greek discoveries in astronomy, Hipparchus (c. 150 B.C.), one of the greatest scientists of antiquity, is commonly referred to as the "father of astronomy." Most of his observations were made at Alexandria, the great intellectual center of the Greek world from the third century before the Christian era.³ The results of his labors and those of his predecessors are embodied in Ptolemy's Syntaxis⁴ and Geography, which remained the authoritative texts in astronomy and geography in the western schools until the beginning of the sixteenth century, but were known only through the Arabic versions. "Ever since this epoch, the conception of the sphericity of the earth, its poles, its axis, the

¹ See Vol. I, p. 114.

² See Vol. I, pp. 111 ff.

⁸ See Vol. I, p. 12.

[&]quot;Syntaxis," or Mechanism of the Heavens, better known under its Arabic name, "Almagest," the Greatest, because it was considered by the Arabs to be the greatest work on the subject.

equator, the arctic and antarctic circles, the equinoxial points, the solstices, the inequality of climate on the earth's surface, have been current notions amongst scientists. The mechanism of the lunar phases was perfectly understood, and careful, though not wholly successful, calculations were made of intersidereal distances." The many calculations involved in his astronomical work led Hipparchus to lay the foundation of another branch of mathematics. Mention is made of a treatise by him on the chords of arcs of circles, which is nothing else than a treatise on trigonometry, since we know that the ancients used the chord of an arc instead of the sine, as we do to-day. The change from chord to sine was made by Peurbach (1423-1461) in his translation from the Greek of Ptolemy's Almagest. He also calculated the first trigonometrical table. Peurbach's greatest title to fame, however, is the formation of Regiomontanus (Johann Müller, 1436-1475), the real founder of modern trigonometry, whose pioneer work was perfected by Rheticus (George Joachim, 1514-1576), "the great computer whose work has never been superseded."

Hippocrates of Cos (c. 460-379 B. C.), whom Plato compares with the artist Phidias and who was later on called the "Great," the "Divine," is considered the founder of the science of medicine. His greatness lies in his having pointed out the way in which medicine could become a science, namely through the observation of individuals, of all perceptible symptoms in each patient, in order to reach certain principles based on experience. Hippocrates and his followers looked upon medicine from the practical standpoint, as a science and an art of healing the sick, consisting mainly in aiding the powers of nature. Herophilus of Chalcedon (c. 300 B.C.) and Erasistratus of Julis (c. 330-240 B.C.) are mentioned as having done some remarkable work in human anatomy at Alexandria. Galen of Pergamum (c. 131-201) gathered all the medical knowledge of his time, and out of it produced a work which for centuries remained an authority on the subject. This work,

medicine

Weber, A., History of Philosophy, p. 161.

translated and commented upon by the Arabs, became the canon of medical science in the western schools after the twelfth century, though there was much independent practice based upon personal observation at the bedside.

and natural science became subject matter for mediæval scientific teaching. The results of the Greek investigations of nature were organized and codified by Aristotle in a number of treatises. By 1300 they had all reached the European schools and became the basis of scientific instruction in the faculty of arts. But instead of following the advice of the great thirteenth century Schoolmen and that of Aristotle himself, to base all scientific study on the observation of nature, the schools came to look upon his writings as something final, something which could not be improved upon.

Modern discoveries in geography,

The modern scientific movement opened with a series of brilliant geographical discoveries. Prince Henry, the navigator (+ 1460), discovered, and annexed to Portugal, Porto Santo, Madeira, the Canaries, Cape Verde with its islands and the coast of Sierra Leone. In 1486 Bartolomeu Dias (+1500) discovered the Cape of Good Hope and in 1497-1498 Vasco da Gama (c. 1469-1524) a new sea route to India, where Goa became the capital of a great Portuguese empire. In 1492 Christopher Columbus discovered America and in the following thirty years the entire coast, from Labrador in the north to the Fire Islands in the south, had been explored. Most remarkable of the voyages following Columbus' discovery was that of the Portuguese Ferdinand Magellan (c. 1480-1521), sailing under the Spanish flag. Starting from Spain, he found a westerly way to the Pacific through the straits which bear his name and discovered the Philippine Islands, where he died, but some of his ships completed the circumnavigation of the globe, thus proving the rotundity of the earth. As a result of these discoveries, the traditional teachings concerning the earth had to be modified, but new worlds had been opened to Christian civilization, new fields to scientific investigation and colonization.

astronomy,

No less revolutionary were the discoveries in astronomy, mathematics, physics, chemistry, and biology, which followed one another in rapid succession during the next two hundred years. In 1543 Nicolaus Copernicus (1473-1543), a canon of Frauenburg on the Baltic coast, published his great work *De Revolutionibus Orbium Celestium* (*On the Revolutions of the Celestial Bodies*),¹ in which he set forth the theory of the universe known as the heliocentric system. For a thousand years the schools had taught Ptolemy's system, according to which "the earth is a sphere, situated in the center of the heavens." Copernicus relegated the earth among the planets revolving around the sun. In his dedicatory letter to Paul III, he thus explains to the Pope how he came to evolve his new theory:

"When I had for a long time thought upon the uncertainty of the traditional mathematical doctrine concerning the path of the heavenly bodies I took the pains to read through the writings of all the philosophers that I could get together, in order to find out if some one of them had not stated the opinion that the movements of the heavenly bodies might be other than the professional mathematicians had asserted." He discovered, in fact, that at least four of the ancient philosophers had taught that the earth moves. He then goes on to say: "When I had received this suggestion I began myself also to meditate upon a motion of the earth After I had then assumed the motions which I assign to the earth in the following work, I found after careful investigation, extending through years, that if the movements of the other planets were referred to the motion of the earth in its orbit and reckoned according to the revolution of each star, not only could their observed phenomena be logically explained, but also the succession of the stars and their size, and all their orbits, and the heavens themselves would present such a harmonious order that no single part could be changed without disarranging the others and the whole universe. In accordance with this theory, I have drawn up the plan of my work."

Opposition was first raised to Copernicus' system by the Protestants on Biblical grounds. The Catholics did not come out openly against it until seventy-three years later, in connection with the controversy aroused by Galileo through his intemperate advocacy of the system.² A Dane, Tycho-Brahe

¹ Cardinal Nikolaus of Cusa (1401-1464) had already, in the preceding century, taught the rotation of the earth around its axis.

² See Gebler-Sturge, Galileo Galilei and the Roman Curia; Grisar, K., Galilei Studien.

(1546-1601), basing his conclusions upon a series of observations carried on for more than twenty years, showed that Aristotle's explanations of the heavens was wrong in many particulars. The German, Johann Kepler (1571-1630), confirmed the theory of Copernicus by his splendid labors on the orbits of the planets and the laws of their motion. The Italian Galileo Galilei (1564-1642), by means of the telescope, of which he is the virtual inventor, made several brilliant astronomical discoveries, chief among them that of the satellites of Jupiter. Finally, the Englishman, Isaac Newton (1642-1727), gave a satisfactory mathematical explanation of the theory of Copernicus and he formulated the law of gravitation.¹

mathematics.

These astronomical discoveries were made possible by the remarkable progress of the mathematical sciences in the sixteenth and seventeenth centuries. In 1545 the Italian physician, theosophist and mathematician, Girolamo Cardano (1501-1576), published in his Ars Magna several discoveries in algebra, particularly the solution of the cubic equation, which had been found by Tartaglia (Niccolo Fontana, 1500-1557), but was developed by Cardano, and has ever since borne his name. In the same treatise appeared the solution of the biquadratic equation discovered by Cardano's disciple, Ferrari (1522-1565). But the real founder of modern algebra was the Frenchman. François Viète (1540-1603). He expressed all quantities, both known and unknown, by letters² and showed how to perform with symbols the operations which formerly were performed only with numbers. Viète also seems to have been the first to deal with the solution of equations of all degrees and to use graphs to express equations; this was the first step towards the closer union between algebra and geometry to be realized later by Descartes. In 1614 the Scotchman, John Napier (1550-1617), published his Mirifici Logarithmorum Canonis Describtio. This invention, which placed an admirable instrument in

¹ Elaborated by Newton in his "Principia Philosophiæ Naturalis Mathematica."

² Most of the symbols used in arithmetic and algebra came into use after the fifteenth century.



the hands of scientists, was perfected and simplified by Henry Briggs (1556-1630) and other scholars of the seventeenth century, the most brilliant period in the history of mathematics. Only a few of its great names and achievements can be mentioned here. The Italian, Bonaventura Cavalieri (1598-1647), a member of the Congregation of Hieronymites, invented the Method of Indivisibles, a forerunner of the integral calculus, which has since superseded it. The Frenchman, René Descartes (1596-1650), by his application of algebraic methods to geometry, introduced a new branch of the science of mathematics, analytic geometry. The German, Gottfried Leibniz (1646-1716), and the Englishman, Isaac Newton (1642-1727), almost at the same time, discovered calculus which has been pronounced the "most wonderful instrument of discoveries that men have ever possessed." The study of calculus and its application, not only to algebra and geometry, but also to the phenomena of nature, has remained, ever since its discovery, the favorite work of mathematicians.

Progress in the natural sciences and their applications was no less noteworthy than in mathematics. Simon Stevin of Bruges (1548-1620) made remarkable pioneer work in mechanics. Galileo established the laws of falling bodies as they are still formulated and he showed their application to projectiles; he demonstrated the laws of equilibrium, set forth the principle of flotation and he is also credited with the invention of the thermometer. The Italian, Evangelista Torricelli, invented the barometer and the Frenchman, Blaise Pascal, who also was an eminent mathematician and philosopher, made important contributions to the science of hydrostatics; in the De Arte Magnetica of the Englishman, William Gilbert (1540-1603). was foreshadowed the modern science of electromagnetics; the Sceptical Chymist of Robert Boyle (1627-1691) opened the way for the scientific period of chemistry; Otto von Guericke (1602-1686), burgomaster of Magdeburg in Hanover. invented the air-pump and made the experiment now known as the Magdeburg hemispheres; the compound microscope.

the natural sciences and their applications

which appeared around 1650, was used with remarkable success by Marcello Malpighi (1628-1694), the founder of comparative physiology, and Athanasius Kircher (1601-1680), a member of the Society of Jesus, the inventor of the magic lantern and the founder of the museum which bears his name in Rome. The Hollander, Christian Huygens (1629-1695), invented the pendulum clock; the Belgian, Mercator (Gerhard Krämer, 1514-1594), completed in 1569 his great world map,

which marks an epoch in cartography. The Italian, Andrea Cesalpino (1519-1603). and the Swiss, Conrad Gesner (1516-1565), both physicians, stand as the first naturalists of modern times. It was in their time that the first botanical gardens in Europe were laid out, the earliest at Padua. Pisa and Rome. Cesalpino was, for a time, the director of the Pisa garden; later he became professor of medicine at the Sapienza in Rome and physician to Pope Clement VIII. As was noted veys' discovery of the circula-



Clement VIII. As was noted before, he anticipated Har-

tion of the blood. The Belgian, Andreas Vesalius (1514-1565), for several years professor at the University of Padua, laid down the foundation of scientific anatomy and technique of dissection. To the Swiss, Theophrastus of Hohenheim, commonly referred to as Paracelsus (1493-1541), practical medicine is indebted for the theory of the causes of disease and the introduction of chemical therapeutics, and to the French field physician, Ambroise Paré (1517-1590), the art of surgery is indebted for radical improvements. The work of Wil-

liam Harvey (1578-1657) on the circulation of the blood gave the death-blow to the traditional medical science based on the works of Galen and his Arabic commentators. Johann von Helmont (1578-1644) with Paracelsus gave the first impetus to the modern study of chemistry, which was applied to the industrial arts by the Saxon, Agricola (1494-1555), and the Frenchman, Bernard Palissy (1508-1589). Thomas Sydenham (1624-1689), the "English Hippocrates," and the Hollander, Hermann Boerhave (1668-1738), the most famous practitioner of his time, were the pioneers of modern practical medicine. They laid down the principle that in medicine, as in the natural sciences, the inductive method should be followed. Only when the causes of the disease have been investigated and the laws governing its course are known can the proper remedies be prescribed.

exerted a deep influence on philosophy.

All these scientific discoveries, particularly the appearance of Copernicus' Celestial Revolutions, exerted a deep influence on the intellectual life of Europe and led to a number of philosophical innovations. Before attempting to outline this "philosophical reformation," however, it will be well to revert for a while to Scholastic philosophy, which was still, with here and there some slight variations, the philosophy of the schools in the seventeenth century. The first characteristic of Scholastic philosophy, it will be remembered, is its use of dialectic. The Schoolmen upheld the prerogatives of reason whenever and wherever it was at work in its proper field; they revered the authority of revelation, but they appealed to reason in the elucidation of the problems of theology and they upheld its supremacy in all matters of pure science. A second characteristic of Scholastic philosophy is its eclecticism. Starting with the logical treatises of Aristotle, it gradually assimilated all his works and it used them as the foundation of its own system of speculative thought and in the rational exposition of Christian doctrine. To that extent only scholastic philoso-

¹ See Vol. I, chapter VIII.

phy was Aristotelian; in many points it departed radically from the doctrines of the master and it was ever ready to admit elements of truth from whatever source they might come, whether ancient Greece or the Patristic age or Arabian writers. The essential trait of Scholastic philosophy, however, is neither its use of dialectic nor its comprehensive eclecticism, but its union with theology. For the Schoolmen, there is and there could be no antagonism between religion and science, between theology and philosophy; though independent, they can never contradict each other, and herein lies not only the main characteristic of Scholasticism, but the essential difference between it and modern philosophy. The latter, breaking the mediæval alliance with theology, reasserted the Averroistic principle, that what is true in theology might be false in philosophy.

The chief cause of the change from Scholasticism to modern philosophy was the decay of Scholasticism itself. With a few honorable exceptions,2 its representatives in the fifteenth and sixteenth centuries were lost in the discussion of frivolous, useless subtleties; they utterly failed to grasp the bearing on philosophy of humanism, of the Reformation and particularly of the scientific movement. Nothing better than this failure to grasp the consequences for philosophy of the new scientific discoveries shows to what extent the modern Schoolmen had fallen away from the spirit of their great predecessors of the thirteenth century. Roger Bacon and Albertus Magnus had advocated and practiced the observation of nature: St. Thomas had insisted upon the necessity of starting from empirical knowledge in the building up of a science and, in a remarkable passage, he had even stated that the astronomical theories which were current in his own time might be replaced

¹ See Turner, W., History of Philosophy, p. 393.

² Among them, Cajetan (1469-1534), the author of a classic Commentary on the Summa Theologica of St. Thomas, and the founders of Neo-Thomism in Rome and the Iberian peninsula, especially Toletus (1532-1596) and Suarez (1548-1617).

by others.¹ Instead of opposing the scientific movement, the sixteenth century Schoolmen should have taken the lead and shown that there is no antagonism between the metaphysics of the School and the new discoveries. Like Columbus and Copernicus, they should have shown their contemporaries that there was many a passage in the text used by the schools which foreshadowed the scientific revolution.

Apart from various attempts at a revival of the ancient system of Greek philosophy,2 the first radical departure from Scholasticism is seen in the natural philosophy which arose around the discoveries of Copernicus, Galileo and Kepler. Its leading exponents in Italy were Giordano Bruno (1548-1600) and Tommaso Campanella (1568-1639). According to the first, God and the universe are identical, because both are infinite and there cannot be two infinites.3 Campanella, a disciple of the Greek skeptics, was one of the first modern philosophers to contribute an essay concerning human understanding. His system of metaphysics, which avoids the pantheism of Bruno, rests on a theory of the conditions of knowledge.4 The leading exponent of natural philosophy, however, was the Englishman, Francis Bacon (1561-1626).⁵ If we would discover the real nature of things, says Bacon, we must not seek it in books or in authorities; we must give up all preconceived notions and false appearances or "idols." Of these idols, he enumerates four different kinds: those of the "tribe," arising from the very nature of the human mind, for example, the tendency to anthropomorphize; the idols of the "den," arising from the particular character of the person; the idols of the "market place," which are the result of social intercourse and the nature of language; finally the idols of the "theatre."

The philosophy of nature.

[&]quot;Illorum autem suppositiones quas adinvenerunt non est necessarium esse veras quia forte secundum alium modum nondum ab hominibus comprehensum apparentia circa stellas salvatur." In Lib. IIum De Cœlo, Lect. 17.

² See pp. 31ff.

⁸ See Turner, W., History of Philosophy, p. 429.

⁴ Ibid., p. 430. ⁵ Ibid., p. 435.



BACON, His Age's Pride and Britam's Glory,
Whose Name will still be Famous in Her Story,
Having by's Works oblig'd all future Ages
To pay Him Thanks as many as His Pages,
Having well-weigh'd each Tittle of that Praise
Tound a great part arose from His ESSATES.
Cross sculp.
W:GRIFFITH

which arise from tradition and the authority of teachers. Bacon distinguishes between primary philosophy and metaphysics. Primary philosophy is concerned with the notions common to all the particular sciences and the latter he divides, queerly enough, into three classes, according to the mental faculty from which they are derived (memory, imagination and reason); history, including civil and natural history; poesy; philosophy, which he divides into natural theology, natural philosophy, and human philosophy. In natural philosophy, again, Bacon distinguishes between metaphysics, dealing with what he considers barren speculation, and physics proper, the only branch of knowledge in which he is really interested, because of its practical applications. Bacon, moreover, makes a sharp distinction between theology and science. The first one, according to him, deals with dogmas which are objects of faith, whereas science is concerned with real knowledge, a position, as remarked before, diametrically opposed to the teachings of the Schoolmen. In his Novum Organum, which was intended to supersede Aristotle's Organon, Bacon explains his own conception of induction, which he regards as the only way to obtain a knowledge of nature. The searcher must, first of all, free his mind from prejudices, the "idols," then observe facts, and from this observation of facts, formulate the laws governing them. He should never try to "anticipate" nature by his suppositions, but patiently gather and compare the instances in which a certain effect occurs and those in which it does not, and from this comparison draw his conclusions. Though Bacon's personal applications of the rules he laid down were, on the whole, crude and indifferently successful, he deserves credit for having called attention to the necessity of careful observation and experimentation in order to discover and apply the hidden laws of nature. On the other hand, he failed to grasp the value of imagination in scientific research, and his conception of the whole process is decidedly inadequate. What he advocated under the name of induction is, at best, a beginning in the real method of scientific investigation,

which was applied so successfully by Bacon's contemporaries and has been very aptly summed up in the formula, "observe, suppose, verify," i.e., start from the facts, appeal to your imagination, and use both induction and deduction.

Another exponent of natural philosophy, Thomas Hobbes¹ (1588-1679), a friend of Bacon, was the forerunner of materialism and positivism. According to him, philosophy can have no other object than corporeal substance, the only reality we can think of. Hobbes, however, is best known as a political writer, the advocate of absolutism in government. What the State commands, says Hobbes, is good, what it prohibits is bad. Its will is the supreme law. A long way, indeed, from the principles of St. Thomas' De Regimine Principis and Dante's De Monarchia!2 Contemporaneous with the rise of these systems of natural and political philosophy, other systems sprang up among the reformers themselves. Melanchton adapted Aristotelian philosophy to the tenets of Protestantism, and there also developed various types of mysticism. The best known and most influential of these systems was that of Jacob Böhme (1575-1624), "the Cobbler of Görlitz," sometimes referred to as the "German Philosopher," because his writings were composed in German, the only language that he knew "3

Far more important than any of the preceding systems of philosophy is that of René Descartes, the "Socrates of Modern Thought."4 The originality of Descartes' philosophy lies not so much in its content as in its form. He observes that all he knows, or thinks he knows, he has received from tradition or through the senses; but, says Descartes, tradition and Descartes, senses can deceive us, and so he resolves to doubt everything. until he comes to some truth, the certainty of which forces itself upon his reason. Such a truth, he believes, he has dis-

¹ Turner, W., History of Philosophy, p. 443.

² Ibid., pp. 377, 383. ⁸ Ibid., p. 439.

Mahony, M., "Cartesianism" is a lucid and thorough discussion of Descartes' system and its influence on modern thought.



DESCARTES

covered in the fact of his existence. To doubt, is to think; and to think is to exist; "Cogito, ergo sum." From this self-evident notion Descartes starts out to rebuild what he has destroyed. Objective evidence has for him no value; "clearness and distinctness of ideas," i.e., the testimony of his own consciousness (supported by the notion of the existence of God) is his only criterion of truth. His method is deduction,

which he brings into the field of philosophy from that of mathematics, Descartes' favorite subject. In his *Discourse on Method*, he says:

"Above all I was delighted with the mathematics on account of the certainty and evidence of their demonstrations, but I had not, as yet, found out their true use, and although I supposed that they were of service only in the mechanic arts, I was surprised that upon foundations so solid and stable no loftier structure had been raised." And again: "Those long chains of reasoning, quite simple and easy, which geometers are wont to employ in the accomplishment of their most difficult demonstrations, led me to think that everything which might fall under the cognizance of the human mind might be connected together in the same manner, and that, provided only one should take care not to receive anything as true which was not so, and if one were always careful to preserve the order necessary for deducing one proof from another, there would be none so remote at which he might not at last arrive, nor so concealed which he might not discover."

The glaring defects of Descartes' system have been pointed out again and again: the inconsistencies involved in his use of systematic doubt, the insufficiency of his criterion of truth, the contradictions between his metaphysics and anthropology, the one affirming what the other denies. Nevertheless, such as it was, his philosophy had a deep influence on the theology, literature and science of the seventeenth century, and to a great extent it has determined the course of modern philosophical thought. Its doctrines, either directly or indirectly, have been the starting-point of the various systems of philosophy, which have followed one another in rapid succession during the last three hundred years, and ultimately displaced the traditional philosophy of the schools.¹

The new interest in scientific investigation and philosophical speculation led to the foundation of societies for the study of questions of science and philosophy, the discussion of the methods used and the results achieved by their members.² Some of these learned societies, like the Royal Society of London (1662) and the Academy of Science in France (1666), were national institutions. All of them at first were

² See p. 23.

¹ The pantheism of Spinoza, the idealism of Leibniz and Berkeley, English empiricism and French sensism, which culminated both in the materialism of the Enlightenment.

wholly outside the universities which, with few exceptions, and these chiefly in Italy, for a long time kept aloof from the scientific movement. The leading scientists were, most of them, independent workers. The work of the universities, as well as that of the lower schools, as we shall have occasion to note again and again, continued in the sixteenth, the seventeenth and even the eighteenth centuries along the lines of mediæval instruction, modified somewhat by humanism and, in Protestant countries, by the influence of the Reformation.

QUESTIONS FOR DISCUSSION

1. Show the relation between the revival of learning and the scientific movement.

2. What were the chief characteristics of the thought life of the fifteenth, sixteenth and seventeenth centuries?

3. Contrast Aristotle's and Bacon's conceptions of induction.

To what extent can scientific induction be used in the school-room?
 Contrast Bacon's conception of induction and the present-day conception.

6. Show the development of new departments of science into new

school subjects.

Contrast the mediæval quadrivium and the modern conception of science.

8. Show that deduction is no less necessary than induction in scientific work.9. What country has contributed most to scientific progress at the

beginning of modern times?

10. Show fully the influence of the geographical and astronomical discoveries on the teaching of the schools.

SOURCES

See the following publications of the John Crerar Library, Chicago: A list of Books on the History of Science; Supplement to the same; A list of Books on the History of Industry and Industrial Arts.

REFERENCES

Armitage, F. P., A History of Chemistry.
Ball, R. S., Great Astronomers.
Buckley, A. B., A Short History of Natural Science.
Cajori, F., A History of Mathematics.
A History of Physics.
Turner, W., History of Philosophy.
Walsh, J. J., The Popes and Science.
Whewell, W., History of the Inductive Sciences.

CHAPTER IX

REALISM¹ IN EDUCATION

PPOSITION to Humanistic Education. Our survey of the educational results of the Revival of Learning has shown us, that even before the beginning of the sixteenth century, humanistic education had become no less formal, no less unreal, for those who did not intend to prepare for

the professions, than the type of education it had superseded. One after the other, the subjects of the broad humanistic course of the early Revival had been dropped from the curriculum, until there remained practically nothing else than religious instruction and the classics; grammar was taught just as formally as it had been in the mediæval schools and what was prized in Latin and Greek literature was not its content, but the linguistic training which its study involved. This narrow humanism held sway in the schools for over three centuries. Its first opponents are known in the history of education as realists, because they held that education should deal with the realities of the present life. Of those realities and their relative values they held different opinions, but they were all of one mind in opposing existing conditions in institutional education. The literary element, they believed, was too much emphasized; reason, its development and training did not receive the attention they should have received; the discipline of the schools was too harsh and the physical welfare of the child was not properly taken care of; above all, the school did not provide adequate preparation for the concrete exigencies of life. It must be

Opposition to humanistic education.

¹This educational realism, let it be noted, was entirely different from the realism of the Schoolmen (See Vol. I, chap. VIII.). In fact, this modern realism is very akin to mediæval nominalism.

understood that the term realism does not refer to schools or systems of schools, at least in the early stages of the movement. Most of its advocates were not teachers, but writers, who saw the defects of the existing system of education and sought to arouse public interest in its reform. It was only gradually that realism found its way into school-room practice; even then, for a long time, its principles were applied only partially, and in a very limited number of institutions. Of these principles, there were three different formulations and applications, known as humanistic or verbal realism, social realism and sense realism.

Humanistic or verbal realism¹ was the first form of the reaction against the formalism of the schools. Like the classicists or narrow humanists, the verbal realists insisted, in addition to religious instruction, on the importance of the study of the classics. But since education was to reveal and prepare for the realities of life, the study of classical literature was to be one of content instead of one of form. The work in grammar should be limited to the minimum requirement for the understanding and appreciation of literature. A wide range of writers should be read, not so much, as in the case of the narrow humanist, for linguistic attainments, but for the sake of the useful information they could supply in all branches of knowledge. Like all humanists, the verbal realists believed that ancient literature, both sacred and secular, contained all that was worth knowing for youth:

Emphasis upon knowledge gained through the classics.

"Not only did ancient philosophy contain the true philosophy of this life, but languages were the key to the real understanding of the Christian religion. Not only did mastery of these languages give power of speech, and hence influence over one's fellows; but if military science was to be studied, it could in no place be better searched for than in Cæsar and in Xenophon; was agriculture to be practiced, no better guide was to be found than Virgil or Columella; was architecture to be mastered, no better way existed than through Vitruvius; was geog-

¹Raumer, K., Geschichte der Pädagogik, I, p. 330, seems to have coined the phrase "verbal realism" in order to distinguish that conception of studies from the "real realism" of Bacon and his followers.

raphy to be considered, it must be through Mela or Solinus; was medicine to be understood, no better means than Celsus existed; was natural history to be appreciated, there was no more adequate source of information than Pliny and Seneca. Aristotle furnished the basis of all the sciences, Plato of all philosophy, Cicero of all institutional life and the Church Fathers and the Scriptures of all religion." 1

Desiderius Erasmus (1466-1536), Juan Luis Vives (1492-1540), Pierre Ramus (1515-1573), François Rabelais (1483?-1553), and John Milton (1608-1674), are the leading representatives of this early phase of realism.2

François Rabelais, successively Franciscan friar, Benedictine monk, doctor of medicine, canon and finally rector of a parish in the vicinity of Paris, had a roving and, on the whole, not very edifying career. He wrote almanachs and various works of erudition and medicine, but he is known chiefly on account of his Pantagruel and Gargantua. a social and irreligious satire, which conceals a pagan philof buffooneries and extravagances. Nature, says Rabelais In substance, is but the expression of the vent of the ve osophy of life under the veil pression, the image of an all-



Rabelais

powerful, all-merciful Creator; hence, nature, too, is all-powerful and all-merciful and contains nothing but goodness. There can be no question of a fallen human nature, of original sin. Evil is not in nature, but in any attempt to repress it, in any form of asceticism. Man is essentially good; let him follow all the impulses of his nature, and he cannot fail to fulfill his

¹ Monroe, P., A Text-book on the History of Education, p. 444. ² On the first three see chap, III,

destiny. Rabelais does not, of course, formulate his doctrine in this crudely dogmatic way; that would have been rather unsafe in France at the time he published his *Pantagruel and Gargantua*; he is careful to conceal it beneath the mask of the clown and fool, but the ridicule which is thrown upon the representatives of Christian asceticism and the indulgence shown even for the worst animal instincts leave no doubt as to where the sympathy of the author lies.

Rabelais' pedagogy is a corollary of his philosophy of life. It is a plea for the free and complete development of human nature, that the youth may be prepared to deal with the realities of life and enjoy it to the full. He strongly condemns the dominant formal education. For that verbal training, as we see it in the case of the giant Gargantua, he would substitute a well-rounded, informal preparation, in which the reading of the Scriptures and the classics, for the sake of their content, would alternate every day with informal conversations between teacher and pupil on current topics, or with games and sports. Rabelais' training in medicine made him realize the value of physical exercise, both for the body and the mind, and led him to insist upon the study of the sciences, though, it must be said, such study was to be one of classical scientific writings. His program of studies is outlined in a letter of the giant Gargantua to his son, Pantagruel, which concludes, as follows:

"I intend, and will have it so, that thou learn the languages perfectly; first of all, the Greek, as Quintilian will have it; secondly the Latin; and then the Hebrew for the Holy Scripture's sake; and then the Chaldee and Arabic likewise, and that thou frame thy style in Greek in imitation of Plato and for the Latin after Cicero. Let there be no history which thou shalt not have ready in thy memory;—unto the prosecution of which design, books of cosmography will be very conducible and help thee much. Of the liberal arts of geometry, arithmetic and music, I gave thee some taste when thou wert yet little, and not above five or six years old. Proceed further in them, and learn the remainder if thou canst. As for astronomy, study all the rules thereof. Let pass, nevertheless, the divining and judicial astrology, and the arts of Lullius, as being nothing else but plain abuses and vanities. As for the civil law, of that I would have thee to know the fair text by heart, and then to confer them with philosophy.

"Now, in the matter of the knowledge of the works of nature. I

would have thee study that exactly; that so there be no sea, river, nor fountain, of which thou dost not know the fishes; all the fowls of the air; all the several kinds of shrubs and trees, whether in forest or in orchards; all the sorts of herbs and flowers that grow upon the ground; all the various metals that are hid within the bowels of the earth; together with all the diversity of precious stones that are to be seen in the orient and south parts of the world. Let nothing of all these be hidden from thee. Then fail not most carefully to peruse the books of the Greek, Arabian and Latin physicians, not despising the Talmudists and Cabalists; and by frequent anatomies get thee the perfect knowledge of that other world called the microcosm which is man. And at some of the hours of the day apply thy mind to the study of the Holy Scriptures; first, in Greek, the New Testament, with the Epistles of the Apostles; and then the Old Testament in Hebrew. In brief, let me see thee an abyss and bottomless pit of knowledge; for from henceforward, as thou growest great and becomest a man, thou must part from this tranquility and rest of study, thou must learn chivalry, warfare, and the exercises of the field, the better thereby to defend my house and our friends, and to succor and to protect them at all their needs against the invasion and assaults of evil doers. Furthermore I will that very shortly thou try how much thou hast profited, which thou canst not better do, than by maintaining publicly theses and conclusions in all arts, against all persons whatsoever and by haunting the company of learned men, both at Paris and otherwhere Reverence thy preceptors; shun the conversation of those whom thou desirest not to resemble; and receive not in vain the graces which God hath bestowed upon thee. And, when thou shalt see that thou hast attained to all the knowledge that is to be acquired in that part, return unto me that I may see thee and give thee my blessing before I die, My son, the peace and grace of our Lord be with thee, AMEN.

"Thy father,

"GARGANTUA." 1

This encyclopedic program of studies, which the satirist Rabelais outlined in jest for his giant, is adopted in earnest by Milton for the Academy of his Tractate on Education. After criticising the work of the existing schools in which boys "spend seven or eight years merely in scraping together and Milton. so much miserable Latine and Greek as might be learnt otherwise easily and delightfully in one year," he outlines his plan for a course of studies which is to last nine years, from twelve to twenty-one. The first year is to be taken up with the study of Latin grammar, arithmetic, geometry and the reading of some easy Latin and Greek books on education "to make them

¹ Rabelais, F., Heroic Deeds of Pantagruel, Bk. II, chapter VIII, trans. by Urquhart.

expert in the usefullest points of grammar." The next three or four years are to be devoted to the study of Greek, agriculture, geography, natural philosophy, physiology, mathematics, engineering, architecture and natural history. In the last

stage, ethics, economics, politics, history, theology, church history, logic, rhetoric, composition, oratory, are to be mastered. All these subjects are to be learned through the reading of the appropriate authors, not only in Greek and Latin, but in Hebrew, Chaldee, Syriac and Italian. A huge mass of information in which is reflected the pansophic tendency of the age. Milton insists on the importance of moral and religious training as also on the



boy's physical welfare. Of the purpose and nature of education, he says:

"The end of learning is to repair the ruins of our first parents by regaining to know God aright, and out of that knowledge to love Him, to imitate Him, to be like Him as we may the nearest by possessing our souls of true virtue, which, being united to the heavenly grace of faith, makes up the highest perfection. But because our understanding cannot in this body found itself, but on sensible things, nor arrive so clearly to the knowledge of God and things invisible, as by orderly conning over the visible and inferior creatures, the same method is necessarily to be followed in all discreet teaching. And seeing every nation affords not experience and tradition enough for all kinds of learning, therefore, we are chiefly taught the languages of those people who have at any time been most industrious after wisdom; so that language is but the instrument conveying to us things useful to be known. And though a linguist should pride himself to have all the tongues that Babel cleft the world into, yet if he have not studied the solid things

in them as well as the words and lexicons, he were nothing so much to be esteemed a learned man, as any yeoman or tradesman competently wise in his mother dialect only." 1

Milton's definition of a liberal education deserves quotation: "I call therefore a complete and generous education that which fits a man to perform, justly, skilfully, and magnanimously all the offices both private and public of Peace and War."2 Milton's Academy probably suggested the name of a new type of school founded in England towards the close of the seventeenth century and thence transplanted to America. Aside from that, his Tractate on Education, like Rabelais' Gargantua and Pantagruel, is of purely academic interest. It had little, if any, effect on the schools of his time, though both undoubtedly had some influence on subsequent educational theorists.

Social Realism. This second form of realism was a reaction against the humanism of the schools, coming from soldiers, courtiers, diplomats, statesmen, men of affairs, who looked upon education as a direct preparation for a happy, successful career in the world of affairs. Such a preparation, they held, the schools did not give, nor could give, so long as their work would remain so remote from the realities of life. The schools Opposition to showed no interest in the scientific inventions and discoveries which were then beginning to attract the attention of the upper realism, class; they did not teach the foreign languages, nor the sciences needed by the soldiers, nor the arts and accomplishments of the courtier and "men of the world," nor did they provide the training needed by the diplomat and statesman. Humanistic realism they considered as hardly any better than the humanism of the schools; it was too bookish, too pedantic, too remote from the exigencies of the present. Success in the world of affairs, they said, depends on one's ability to deal with the concrete problems of every-day life and the readiness with which we adapt ourselves to existing conditions. Education,

both humanism and verbal

¹ Milton, J., Tractate on Education.

² Ibid.

then, should have as its chief purpose the training of the practical judgment and the shaping of natural dispositions, that the young man might feel and move at ease in society. Studies are but accessory means to that end, which is best achieved through social intercourse and through travel, which brings one

into contact with people, with cultures and places made familiar through study. Furthermore, the social realist believed that education of the individual by a tutor is to be preferred to group training in the school.

The best exponent of this conception of education is the French nobleman, civic officer and author, Michel Eyquem de Montaigne (1533-1592). His education had been of the best prevalent humanistic type. His father had carefully super-



Montaigne advocates vised his early training, had secured for him the services of a German tutor who was to speak in Latin only, and then had sent him, at the age of six, to the Collège de Guyenne at Bordeaux, where the best humanistic traditions were maintained. Montaigne's recollections of the years spent in that institution were anything but pleasant. The discipline of school life did not agree with his independent, easy-going disposition and that, to a great extent, accounts for his strictures on the schools of his time. He afterwards studied law in order to qualify for the magistracy, and held several public offices; he was mayor of Bordeaux from 1581 to 1585. Except for this brief period, he spent the last twenty years of his life in travel or in retire-

ment at his castle of Montaigne, reading and writing his Essays. Without a plan of any sort, Montaigne, in these Essays, discourses on all kinds of topics, always delightfully, if not deeply; his favorite topic, one might say the central subject, of the Essays is Montaigne himself, his likes and dislikes, his desires and aspirations, his thoughts and convictions. This self-examination leads him to examine other selves he meets around him in his native Gascony, or in France, or has met in his travels abroad and in his readings. And the result of this inquiry is this: that very few, indeed, are the questions upon which men can agree. "Que sais-je?", "What do I know?" Montaigne is a skeptic. But Montaigne is also an epicurean. "I like life and cultivate it such as it has pleased God to grant it to me with heart-felt gratitude I accept what nature has done for me nature is a gentle guide, but not more so than prudent and wise it is an absolute and, as it were, divine perfection to know how to loyally enjoy one's nature." Let us then studiously avoid all that can mar the pleasure of living. Above all, let us have peace. Why cut each other's throats for the sake of religious and political creeds? Have we not seen that the proof of their absolute validity is beyond the reach of human reason? Montaigne's educational opinions are expressed in his Essays, Of Pedantry, Of the Education of Children, Of the Affection of Fathers for their Children. He strongly insists on the care the body should receive, the hardening process to which it should be subjected, but his method for intellectual and moral training is decidedly too easy and superficial. He seems to be afraid of demanding of the intellect and will that continuous, persistent effort, which alone can produce a well-trained intellect and a strong character. He strongly condemns the school practices of his day:

"We only toil and labor to stuff the memory, and in the meantime leave the conscience and understanding unfurnished and void. And like birds who fly abroad to forage for grain and bring it home in their beak without testing it themselves, to feed to their young; so

¹ Montaigne, M., Essays, Bk. III, passim.

our pedants go picking knowledge here and there out of several authors, and hold it at the tongue's end only to distribute it among their pupils but the worst of it is, their scholars are no better nourished by it than themselves: it makes no deeper impression upon them than upon the other, but passes from hand to hand, only to make a show, to be tolerable company and to tell pretty stories; like a counterfeit coin, of no other use or value, but as counters to reckon with or set up at cards." ¹

education by a tutor, He prefers education by a tutor to that which is received in the schools:

"For a boy of quality, then, who pretends to letters not upon account of profit, nor so much for outward ornament, as for his own proper and peculiar use, and to furnish and enrich himself within, having rather a desire to go out an accomplished cavalier and a fine gentleman, than a mere scholar and a learned man; for such a one, I say, I would also have his friends solicitous to find him out a tutor who has rather a well-made than a well-filled head; seeking, indeed, both, if such a person can be found, but rather to prefer his manners and his judgment before mere learning, and that this man should exercise his charge after a new method."

ideas vs. words,

Things, i. e., ideas and not mere words, should be the aim of instruction: "Let but our pupil be well furnished with things, words will follow but too fast I hold, whoever has in his mind a clear and vivid idea, will express it in one way or another."3 Moral philosophy, adapted to the age of the pupil, is the most important subject in the whole curriculum, because it teaches to be "more wise and good." Latin and Greek should be taught, but not to the neglect of the modern languages, particularly the mother tongue, the study of which should precede that of the classics. A knowledge of some of the traditional subjects, mathematics, physics, rhetoric, logic, may also be imparted, though these subjects are much less important than moral instruction. Montaigne also recommends more flexible, more effective and more pleasant methods of instruction than those in vogue. The tutor might instruct his pupil "sometimes by discourse and sometimes by reading;" he should not labor to stuff the memory, but rather appeal to the understanding of his pupil, remembering that "to know by

8 Ibid.

¹ Op. cit., Bk. I, chap. XXIV.

² Op. cit., Bk. I, chap. XXV.

rote is no knowledge." The languages, even Latin and Greek, should be learned by speaking them; in general the learning process and the atmosphere of the school-room should be made as pleasant as possible.

The aim of education is to train the judgment and shape the character aright, and to that end instruction is but an acces- judgment and sory means; virtue and a sound practical judgment, Mon-character, taigne holds, are the outcome of experience, of social intercourse, of travel, of which he says:

"That he may whet and sharpen his wits by rubbing them upon those of others, I would have a boy sent abroad very young This great world, which some multiply as several species under one genus, is the true mirror wherein we must look in order to know our- the value selves, as we should. In short, I would have this to be the book my of travel, young gentleman should study with most attention. Many strange humors, many sects, many judgments, opinions, laws and customs, teach us to judge rightly of our own actions, to correct our faults, and to inform our understanding, which is no trivial lesson In these examples a man shall learn what it is to know, and what it is to be ignorant; what ought to be the end and design of study; what valor, temperance and justice are; what difference there is between ambition and avarice, bondage and freedom, license and liberty. . . . He shall also learn what secret springs move us and the reason of our various irresolutions; for, I think, the first doctrines with which one seasons his understanding ought to be those that rule his manners and direct his sense; that teach him to know himself, how to live and how to die well."

As it may be gathered from what precedes, Montaigne is not concerned with the training for the learned professions or with the education of the masses; he is interested only in what might be called the secondary school period of the education of a boy, and that, too, for the sons of the nobility. Upon the schools of his time, he had very little, if any, influence at all. Montaigne's The importance of his pedagogical opinions in the history of influence education lies mainly in this, that they fairly well express the attitude of the nobility and gentry of the times towards education, and, since the Essays were widely read, that these opinions must have more or less influenced the views of other educational theorists and prepared the way for later improvements in the content and method of instruction, as also for the

² Op. cit.

on schools

establishment of a new type of school, the academies for the nobility. These academies, which became quite common in the seventeenth and eighteenth centuries, gave a training in riding, fencing and the many graces of the polished man of the world. Some added to these, courses in mathematics, physics, military science, history, geography, law and the modern languages. In German lands, on account of the influence of French ideas there, many *Ritterakademien* (Knightly Academies) or court schools were founded in imitation of the French. In these academies, the sons of the German nobility received a courtly and military training very similar to that imparted in the French academies.

and theorists.

Among the educational theorists who seem to have felt the influence of Montaigne's doctrines, mention should be made of the Swiss, Jean Jacques Rousseau (1712-1778), and the Englishman, John Locke (1632-1704). Both follow Montaigne in stressing physical exercise and the "hardening process," which will make of the child a healthy, vigorous, hardy boy; both, like Montaigne, minimize the importance of book learning, both treat of education by a tutor, but the similarity of views is particularly striking in the case of Locke. Most of Locke's educational doctrines, as will be shown later, are based on his philosophy, but some of the suggestions contained in his Thoughts Concerning Education strongly remind one of Montaigne's positions. As remarked before, Locke is very insistent on physical education; so much so indeed, that he devotes to its discussion the first thirty paragraphs of his Thoughts, which open with the following significant statement: "A sound mind in a sound body is a short but full description of a happy state in this world. He that has these two has little more to look for and he that wants either of them will be but little better for anything else." Like Montaigne, Locke believes that travel has a great educational value, and, like him, he is in favor of private education by a tutor, who "should himself be well-bred, understanding the Ways of Carriage and Measures of Civility, in all the Variety of Persons, Times and

Locke as a social realist.

Places; and keep his pupil, as much as his Age requires, constantly to the Observation of them." Like Montaigne, again, Locke holds that his young gentleman should know Latin, learned like French and Italian through speaking and reading, that a knowledge of some of the school subjects is also useful, but the chief aim of education, he believes, is the shaping of character. "Learning must be had, but in the second place, as subservient only to greater Qualities. Seek out somebody that may know how discreetly to frame his Manners: Place him in Hands where you may, as much as possible, secure his Innocence, cherish and nurse up the good, and gently correct and weed out any bad Inclinations and settle in him good Habits. This is the main Point, and this provided for, Learning may be had into the bargain." Locke's influence on education will be treated at some length in a subsequent chapter, but it may be remarked at this stage that his plea for private education, his insistence upon physical and moral training, were, in some measure, responsible for the spread among the English aristocracy of the practice of using a tutor, and the development in some of the English secondary schools of the physical and ethical sides of education. To Locke's influence must also be ascribed, at least partially, certain elements in the doctrines of his successors among the educational theorists. Rousseau, for one, has acknowledged his indebtedness to the English philosopher for several details in the education of Emile.

Sense-Realism. Humanistic and social realism were, in the main, a mere protest, on the part of some theorists, against the formalism of the schools, a hearking back to the spirit of the early Renaissance. Sense-realism, or "real" realism, was

^{1 &}quot;Though they [the sense-realists] would fathom the nature of things, yet they do not go below the surface. They are also too much taken up with linguistic matters, evaluate too highly the mere names of things Because of this view, it were perhaps more in place to style them the "real verbalists" in opposition to the "verbal realists." Willmann-Kirsch, The Science of Education, Vol. I, p. 262.

Sense-realism, an outgrowth of the scientific movement; a more radical departure from the traditional school practices. An outgrowth of the scientific movement and particularly of the natural philosophy of Bacon, it sought to push into the background the humanistic disciplines which deal with man and put in their place the *realia*, which deal with nature and have, it was held, a greater value in a modern world. It was the ambitious dream of the sense-realists or "innovators," 1 "to regenerate education in all its branches and thereby to advance the welfare and prosperity of the Christian State," 2 to transform pedagogy into a science and thus make teaching and learning more easy, more profitable and less onerous. More specifically these "innovators" advocated the application of the following pedagogical principles, which may be considered typical of their educational doctrines:

its
educational
tenets.

All teaching should be based on, and conform to the laws of nature. What these laws are, they do not state very explicitly.

Instruction should proceed from the concrete to the abstract, i. e., from sense-perception to concept, from example to rule, or again proceed from things, to ideas, to words.

The first language to be taught should be the vernacular, which

is the natural medium of all instruction.

The inductive method, which calls for observation, investigation, analysis, should be used extensively in the class-room.

Mulcaster.

One of the first educationists to give at least a partial formulation of the new theory was the Englishman, Richard Mulcaster (1530-1611), who was headmaster of Merchant Taylors' from 1561 to 1586, and held the same office at St. Paul's from 1596 to 1608. Notwithstanding the classical education which he had received and the position he held at the head of two great Renaissance schools, Mulcaster is no worshipper of Latin. In his *Elementarie*, he says: "Our own language bears the joyful title of our liberty and freedom, the Latin remembers us of our thralldom and bondage. I love Rome, but London better; I favor Italy, but England more. I honor the Latin, but I worship the English." The study of the vernacu-

¹ So-called by the German historian of education, K. von Raumer.

Willmann-Kirsch, The Science of Education, Vol. I, p. 23.
 The full title runs as follows: The Elementarie, Which Entreateth Chiefly of the Right Writing of the English Tung.

lar should precede that of the classics and receive far more attention than these, not only because it is the national language, but because a knowledge of one's mother tongue is more profitable than that of Latin, since the vernacular is the language which the majority of boys will use in life. Of Mulcaster's forty-five Positions, 1 many are devoted to a consideration of physical education, which he treats quite as extensively as Locke. In the remaining Positions, he considers, among other topics, the natural abilities of children, elementary training, the education of girls, higher and professional training, the study of the languages and the importance of the mother tongue. Mulcaster's analysis of the child's natural capacities is not a very complex one: "wit to conceive by, memory to retain by, discretion to discern by" are the three natural powers to be trained by the teacher. All boys, and girls as well, should receive an elementary education, from which all will derive some profit, and the principal subjects to "train the mind in" at this stage are reading, writing, drawing, vocal and instrumental music. Only those who show real ability for advanced school training should be allowed to proceed beyond this elementary stage, which should engage the pupil until he is twelve, and be the starting-point for grammar school study. There should be "ascending colleges for tongues, for mathematics, for philosophy," which should have for their purpose. not only the training of divines, physicians and lawyers, but of teachers as well. Aside from the effect they may have had upon other theorists, Mulcaster's suggestions were of little consequence for the education of the times. The English grammar schools, not excepting those of which he was the head, continued to be conducted as they had been in the past. His position in the history of education is merely that of a forerunner of sense-realism, because of his insistence on the use of the vernacular and his attempt to formulate a new science of education.

¹ Positions Wherein Those Circumstances are Examined for the Training up of Children either for Skill in their Booke or Health in their Bodie.

Bacon.

Another English theorist, Francis Bacon (1561-1626), who has already claimed our attention before, 1 claims it again here, not because of any direct interest of his in school theory and practice, but on account of the influence of his philosophy and method upon the educational "innovators." Next to his yearning for political preferment, Bacon's one great interest was the reorganization of knowledge. As early as 1592 he wrote to his uncle, Lord Burleigh: "I have as vast contemplative ends as I have moderate civil ends, for I have taken all knowledge to be my province; and if I could purge it of two sorts of powers, whereof the one with frivolous disputations, confutations and verbosities [the Schoolmen], the other with blind experiments and auricular traditions and impostures [alchemists, astrologers, etc.] hath committed so many spoils, I hope I should bring in industrious observations and profitable inventions and discoveries — the best state of that province." Bacon's plan for the reorganization of learning² consisted of six parts: a survey of human knowledge as it existed in his time; the formulation of a new method for the investigation of natural phenomena; an experimental history of nature; an outline plan of natural philosophy; a collection of the empirical results already obtained; the formulation of a true philosophy of nature. Only the first two parts of this plan were even approximately finished. Knowledge was then to be reorganized by basing it, not on the sciences which deal with man, the humaniora, but on the realia, which deal with natural phenomena; it

¹ See chapter VIII.

² Bacon's was not an isolated case. There appeared in the sixteenth, seventeenth and eighteenth centuries many works purporting to contain all that is worth knowing. Pansophy, polymathy, polyhistory, pankosmy are some of the terms used to designate such works. "Cyclopedia" or "encyclopedia," which seem to have been coined in the sixteenth century, did not become common usage until the eighteenth century. In some of these cyclopedias new methods of study were offered in connection with the materials collected. Such is the case with Bacon's *Instauratio*. The chief difference between these modern compilations and similar works produced in the Midde Ages (e. g., Speculum Majus, see Vol. I. ch. VIII) lies in this, that the modern cyclopedia treats classical antiquities, but omits theology.

was to use a new method, Baconian induction; it was to be made fruitful,1 that is to say, to promote the betterment of the material conditions of life, through useful applications of the forces of nature to industry, transportation, farming, home life, which would immensely lighten man's burden and transform his habitat - change it into a sort of El Dorado. And when knowledge had thus been reorganized, classified, unified and provided with a new weapon, the new inductive method, it would have been brought, it was held, within the reach of everybody; it would then be disseminated by the schools and through this dissemination of knowledge would ultimately be solved all the problems which have, all through the ages, puzzled and divided mankind. The same visionary hopes had been entertained by the humanists, from a classical revival, by the leaders of the Reformation, from a religious revolution. Both Reformation and humanism had failed dismally in the realization of these ambitious dreams. They had left Europe worse off, spiritually and materially, than it was at the beginning of the fourteenth century. And now science was to try in its turn to make man better and happier by revealing to him the secrets of nature and harnessing its forces in order to minister to his material needs. Bacon's views on education are scattered through his works, in his Instauratio Magna (Great Restoration), some of his many Essays and the New Atlantis, the description of a Utopian State in which ideal conditions of life have obtained because resting upon scientific principles. The social, economic and political welfare of that State is due to its "Solomon's House," an organization whose purpose is scientific research and the application of its discoveries to the betterment of the conditions of human life.

¹ "Knowledge is power" is the popular expression of this teaching. Bacon says, "Scientia et potentia humana in ipsum coincidunt," and his friend Hobbes, "Scientia propter potentiam." Roger Bacon had expressed the same thought three centuries before, only he used the term "potestas," the power that comes from authority, "Ipsa scientia potestas est," instead of "potentia," the power inherent in the thing itself. See Büchmann, Geflugelte Worte, p. 247.

Ratke.

The first one of the educational innovators to apply Bacon's method and the spirit of his philosophy to education was the German, Wolfgang von Ratke (Ratich, from the latinized form of his name, 1571-1633). He claimed that, by applying his principles, the languages could be taught more easily and in much less time than was commonly devoted to their study; that there would ensue a thorough study of the sciences in the schools; finally that, as a consequence of this application, there would follow uniformity in language, government and religion in Germany. Ratke was given twice the control of city schools, first in Augsburg and then in Köthen, and each time, due mainly to his inexperience as a schoolmaster, the experiment proved a dismal failure. Stripped of the extravagant form in which they are couched, Ratke's principles amount to this:

That the study of the vernacular should precede in time and importance that of all languages:

That the knowledge of grammar should be arrived at inductively; That before attempting to study the original of a classical text the pupil should hear time and again a translation of it in the vernacular; That uniformity of method should be aimed at in the teaching of

the languages;

That the teacher should "follow the order of nature";

That everything should be done by experiment and induction;

That nothing should be learned by rote; That compulsion should be done away with.

Though he failed in the application of his principles, Ratke stirred up much thinking and discussion among educators, many of whom were won to his views. He may be considered as the real originator of educational realism and the inspirer of Comenius, its leading representative.

Comenius' life.

Jan Amos Komensky (1592-1671), better known as Comenius, was born at Nivnitz in Moravia. He early lost both parents and, as a result of the carelessness of his guardians, his early education was much neglected; he did not take up the study of Latin until he was seventeen, which was rather late for the time. Wishing to prepare for the ministry in the Moravian denomination or Bohemian Church, he went to Ger-

¹ See Richter, A., Neudrücke Pädagogischer Schriften, Pt. IX and XII.

many to pursue his studies and, upon his return to Moravia, taught in one of the schools of the Brethren¹ at Preirau. He was later admitted to the ministry and eventually became the bishop of the Moravians. Banished from his native land in 1628, with all Protestant ministers, he took refuge at Lissa, in Poland, and there for several years was rector of the Moravian gymnasium. His most important contributions to the theory and practice of education were made during this period:—the Janua Linguarum Reserata and the Didactica Magna were published and many reforms were introduced in the schools of Lissa. In 1641 Comenius visited England in order to submit to Parliament his plan for a reorganization of knowledge, but, as he relates in his own account of the visit, "The plentiful signs of bloody war about to break out disturbed these plans, and obliged me to hasten my return to my own people."2 After his return from England, he settled for some time at Elbing on the Baltic, revising some of his text-books and developing his ideas as to school reform and language teaching (Methodus Linguarum Novissima (Latest Method in Languages). In 1650 he accepted the invitation of the Prince of Transylvania to come to that country and for four years was in charge of a school at Sáros-Patak.³ It was during this period that he published his Orbis Pictus and was consulted with reference to the presidency of Harvard College. He once more returned to Lissa, but was finally driven out by the Poles⁴ and, after much wandering, settled in Amsterdam, where he died at the age of seventy-nine.

Comenius was a voluminous writer, but many of his works need not concern us here, being devoted to religious subjects, and of those that deal with education, only the more important

¹ Officially known as the *Unitas Fratrum*, claiming doctrinal descent from John Hus, though their creed is very akin to Luther's.

² See Quick, R., Educational Reformers, p. 126.

In his Scholæ Pansophicæ Delineatio he describes the ideal school for this city.

⁴ Because he had publicly welcomed to the country the Swedish king, Charles Gustavus, a Protestant enemy.

The Janual series.

will be considered. During his life-time, Comenius was chiefly known as a school-reformer and writer of text-books for beginners in Latin. His first attempt at simplification in the teaching of Latin was his Grammatica Facilioris Pracepta (Precepts of Easier Grammar), followed a few years afterwards by the better known Janua Linguarum Reserata (Gate of Languages Unlocked), intended to give the pupil a start in the study of the Latin vocabulary and to correlate with it a systematic knowledge of things. Each page was divided into two columns; on the right-hand side stood the Latin text, on the left its translation into the vernacular. The Janua having proved too difficult,1 Comenius composed a Vestibulum (Vestibule), which contained but a small part of the words used in the Janua and was to serve as an introduction to it. Grammars, lexicons and treatises were also issued to accompany these two text-books. A few years later, Comenius published a more advanced reader, the Atrium (Entrance Hall). sometimes referred to as the Sapientiæ Palatium, on the same plan as the Janua and, like it, dealing with the "real" things of life. A fourth work in the Janual series, the Thesaurus, sometimes called the Palatium, was to contain extracts from Latin writers, Nepos, Cæsar, Sallust, Virgil, Cicero and others, which would supply reading materials for the upper class in the Latin school, but this work was never completed. The most remarkable and most popular book of the series, however, was the Orbis Sensualium Pictus (The World of Sensible Things in Pictures), in which Comenius carried to its logical conclusion his principle of sense-appeal, by using pictures in connection with the text. This book, which was published in 1657, is. it seems, the first illustrated text-book for children on record.

¹ The Garden of Greek Roots of the Port Royalist Lancelot contains the following pointed criticism of the Janua: "The book is filled with all sorts of unusual and difficult words, and the first chapters are of no assistance for those that follow, nor these for the last, because there is no word in one which is found in the others. The Entrance to languages ought to be a short and easy method to lead us as quickly as possible to the reading of the best written books." See p. 238.



COMENIUS

headed by a rather complicated picture, with numbers referring to corresponding lines in the text. While these and other educational works of Comenius possessed many original features, they also contained much that is borrowed from other writers. That is particularly true of the Didactica Magna and the Janua Linguarum Resarata, Jean Bodin (Bodinus, 1530-1596), a French political writer and educational theorist, seems to have been the first one on record to suggest the idea of such a book as the Janua, but he never carried it out. In 1611, or twenty years before Comenius, an Irish Jesuit, William Bathe (Bateus, 1564-1614), who was then a teacher at Salamanca. Spain, published a Janua Linguarum, to which Comenius was indebted not only for the name, but for the whole plan of his own text. The first edition of this pioneer work contained only Latin and Spanish words, but subsequent editions were made to include four or even eight languages. As in the case of similar works, published by members of the Society of Jesus, the author's aim was, primarily, to help missionaries in the acquisition of foreign languages and, in general, as he himself states, all those "who object to spending long years in the study of the litteræ humaniores, all who wish to learn the nobler languages, Italian, Spanish, German, French." Before long, the method had been adapted to the study of many modern languages. Comenius closely followed it in his Janual series, though departing from it in his selection of the materials, and one may well wonder if the departure was a happy one. "An examination of typical portions of the Irish Janua Linguarum will show that its sententiæ morales were in far closer conformity to true educational ideals than were the later, if better known, sententiæ reales of Comenius. The former aimed at conveying sound ethical principles through words complete but not encyclopedic in their range; the latter offered a systematized vocabulary for natural objects. It

Comenius' indebtedness.

¹ Among other works, besides Bathe's Janua, J. H. Alsted's Encyclopædia, and J. H. Freigius' Pædagogus.

will be easy to form a judgment as to which of the two recedes from true reality into the dreary waste of mere verbal knowledge."1

The text-books prepared by Comenius were but illustrations and amplifications of the principles formulated in his The Great Didactica Magna (Great Didactic),2 which is a full and sys- Didactic: tematic exposition of his conception of education. In its thirtythree chapters, the author deals at great length with the aim of education, the necessity of training for both sexes, school reform, the method of instruction and school organization.

According to Comenius, the end of human life and, conse-

knowledge, which is the one outstanding feature of his conception of education. Like the true disciple of Bacon that he was, Comenius looked upon knowledge as a panacea for all the ills from which mankind is suffering: knowledge of nature and one's self, knowledge of one's relations to other selves and to God, would lead inevitably, he held, to morality and to piety. Thus knowledge, virtue and piety express Comenius' conception of the aim of education, but of the three, knowledge is the basic one; Comenius was a firm believer in pansophia or universal wisdom. His one great ambition was to reorganize completely human knowledge along Baconian lines and then to have it disseminated through the schools. Like all pansophists. he held that, once unified, knowledge would be accessible to all, and its dissemination among the masses would solve all the

quently, the ultimate purpose of education is eternal happiness educational with God. This end, he believes, was to be attained through aim,

economic, political and social problems which stand in the way pansophia;

meant chiefly a knowledge of natural phenomena.

of human happiness. To what extent Comenius' great work on pansophia was an improvement on other encyclopedias we do not know, since it was destroyed in manuscript form in 1657. but his text-books make it clear that, for him, knowledge

¹ Corcoran, T., Studies in the History of Classical Teaching, XVIII.

² The full title covers a whole page.

The following aphorisms formulate Comenius' conception of the manner in which this universal knowledge can be acquired:

1. Universal knowledge, so far as it can be obtained by man, has as its objects God, nature, and art.

2. A perfect knowledge of these three is to be sought.

- The knowledge of things is perfect when it is full, true, and ordered.
- 4. Knowledge is true when things are apprehended as they exist in reality.
- 5. Things are apprehended in their essential nature when the manner in which they have come into existence is understood.
- 6. Each object comes into existence in accordance with its "idea," that is to say, in relation to a certain rational conception through which it can be what it is.
- 7. Therefore, all things that come into existence, whether they are the works of God, of nature, or of man, do so in accordance with their "ideas."
- 8. Art borrows the "ideas" of its productions from nature, nature from God, and God from Himself.
- 9. In fashioning the world, therefore, God produces an image of Himself, so that every creature stands in a definite relation to its Creator.
- As all things share in the "ideas" of the Divine Mind, they are also mutually connected and stand in a definite relation to one another,
- 11. It follows that the rational conceptions of things are identical, and only differ in the form of their manifestation, existing in God as an archetype, in nature as an ectype, and in art as an antitype.

12. Therefore the basis of producing as of apprehending all things is harmony.

- 13. The first requisite of harmony is that there should be nothing dissonant.
- 14. The second is that there should be nothing that is not consonant.
- 15. The third is that the infinite variety of sounds and concords should spring from a few fundamental ones, and should come into being by definite and regular processes of differentiation.
- 16. Therefore, if we know the fundamental conceptions and the modes of their differentiation, we shall know all things.
- 17. Such rational conceptions can be abstracted from phenomena by means of a certain method of induction, and must be posited as the norms of phenomenal existence.
- 18. These norms of truth must be abstracted from those objects whose nature is such that they cannot be otherwise, and which are at everyone's disposal for the purpose of making experiments, that is to say, from natural phenomena.

¹ Keatinge, M. W., The Great Didactic of John Amos Comenius, p. 33.

Perhaps the most interesting, certainly the most practical and most "modern" chapters of the Great Didactic are those dealing with school reform and particularly with the practical problems of instruction in the school-room. While Comenius' conception of a general method "according to nature" is founded, for the most part, on analogies more fanciful than real between psychological processes in the child and natural phenomena, his suggestions concerning school reforms and his principles of teaching, the fruit of a long experience in teaching, show a remarkable grasp of the problems confronting the teacher in the class-room. For this reason, many of the chapters of the Great Didactic supply, even to-day, interesting and profitable reading for the student of education. The following principles, treated in the Great Didactic, formulate Comenius' conception of the teacher's art:

"Following in the footsteps of nature, we find that the process of education will be easy:

principles of teaching:

If it begin early, before the mind is corrupted; If the mind be duly prepared to receive it:

If it proceed from the general to the particular; And from what is easy to what is more difficult;

If the pupil be not over-burdened with too many subjects; And if progress be slow in every case; If the intellect be forced to nothing to which its natural bent

does not incline it, in accordance with its age and with the right method;

If everything be taught through the medium of the senses; If the use of everything taught be continually kept in view;

If everything be taught according to one and the same method,"1

Comenius' plan for the organization of schools comprises five stages: The Mother School, The Vernacular School, The organization, Latin School or Gymnasium, The University and the College of Light. "A mother school," says Comenius, "should exist in every house, a vernacular school in every hamlet or village, a Latin School in every city, and a university in every kingdom or in every province." The mother school, for which he wrote

¹ Great Didactic, chapter XVII.

² Sometimes referred to as the "School of the mother's knee;" more exactly, "The School of the mother's lap," according to the Latin translation, "Schola Materni Gremii,"

his School of Infancy. was to be concerned with education before the age of six and it may be considered as an anticipation of the present-day kindergarten. The vernacular school, corresponding to the period between the ages of six and twelve, was to be divided into six classes and to give to all, both boys and girls, the fundamentals of a preparation for life. As its name suggests, instruction in that school was to be given through the mother tongue. The subjects to be taught were religion, reading, writing, arithmetic and music, together with some general information in history, geography, astronomy, the trades and occupations of life. The Latin school, to be attended by those who intended to prepare for service in Church or State, or to enter the university, covered the period from twelve to eighteen. In this school the languages - the mother tongue, Latin, Greek and Hebrew — were to be taught according to the new method suggested by Comenius, and there were to be six classes as in the vernacular school, each class bearing the name of its principal subject: Grammar, Physics, Mathematics, Ethics, Dialectic, Rhetoric. Above the Latin school was placed the university, corresponding to the period from eighteen to twenty-four, and giving instruction of a more advanced and professional character in every subject taught in the gymnasium. The last step in Comenius' educational ladder, the College of Light, corresponded to Bacon's Solomon's House. This Schola Scholarum or Collegium Didacticum was to "spread the light of wisdom throughout the human race with greater success than has hitherto been attained and benefit humanity by new and useful inventions." The pansophic ideals controlled instruction at every stage. Even the young child was to be taught the various sciences, in a way, of course, that would be consistent with its understanding.

"These different schools are not to deal with different subjects, but should treat the same subjects in different ways, giving instruction in all that can produce true men, true Christians and true scholars; throughout graduating the instruction to the age of the pupil and the knowledge that he already possesses In the earlier schools,

¹ See Monroe, W. S., Comenius' School of Infancy.

everything is taught in a general and undefined manner, while in those that follow the information is particularized and exact; just as a tree puts forth more branches and shoots each successive year, and grows stronger and more fruitful."1

In a number of ways Comenius anticipated the modern

trend of educational theory and practice: he subordinated the Comenius' influence. study of Latin to that of the vernacular; he outlined a school organization very similar to what we have to-day; his Collegium Didacticum foreshadowed the research departments of our modern universities; his mother school anticipated the kindergarten; his pansophic ideals have more or less been realized in the encyclopedic curriculum of the modern school, and many a plea by an eighteenth or nineteenth century theorist seems but an echo of a similar plea outlined in the Great Didactic. However, it must not be forgotten that the educational views of Comenius, aside from the influence exerted by his text-books, had no direct effect upon the schools. His

Great Didactic soon fell into oblivion and it was not brought to light again until the middle of the nineteenth century, when most of the principles it advocates had begun to be applied in the schools independently of any influence of Comenius.

Reference has already been made to Locke in this chapter. There are some elements in his Thoughts Concerning Educa- Locke as a tion and his Conduct of the Understanding, which show the sense-realist, influence of Bacon, Ratke and Comenius, and might warrant his being classed among the sense-realists. Like Comenius, he would begin systematic education with the study of the vernacular; like him, he would have the study of the language of the nearest neighbor precede in time and importance that of Latin, and he also insists on the correlation between the languages and other subjects. But what particularly stamps Locke as a sense-realist is his theory of knowledge with its pedagogical implications. All knowledge, he believes, comes first through the senses, hence all teaching should start from senseperception and observation.

^a Great Didactic, chapter XXVII, pp. 4-5.

Sense-realism in the elementary schools

The influence of sense-realism upon the elementary schools was very slight. Here and there in German lands an attempt was made to introduce the realistic studies in the vernacular schools founded by the reformers. In 1619 a pupil of Ratke reorganized the schools of the Duchy of Weimar along the lines of sense-realism and a little later Andreas Reyher did the same work for the Duchy of Saxe-Gotha. Apart from these and a few other isolated attempts to introduce the "real" subjects into the vernacular schools, elementary education remained unchanged for the next two hundred years. Religion and reading were the only subjects taught in all elementary schools; in some there was given, in addition, a little instruction in writing, arithmetic and music, the latter especially in Teutonic lands. Much deeper and more widespread was the influence of sense-realism upon secondary education. Mention has been made of the academies which, in the course of the seventeenth century, were founded in France, Germany and England. It will be remembered that in the first two of these countries the foundation of academies was the result of social realism, whereas in England their origin may be traced to the influence of Milton's Tractate on Education. The academy which he recommended was actually organized by the dissenting clergymen who were driven out of their parishes by the Act of Conformity¹ in 1662. In this way provision was at once made for the support of the non-conforming clergymen who taught in these academies and for the higher education of the young dissenters, who were excluded from the English universities and grammar schools. Since the chief purpose of these English academies was to prepare for the ministry, the study of Latin, Greek and Hebrew was much emphasized, but their curriculum, like that of the French and German academies, included many of the "real" subjects and some time was also devoted to the study of the vernacular and modern foreign languages.

and the secondary schools.

¹ Sometimes referred to as the Act of Uniformity.

The schools which most thoroughly accepted the principles of sense-realism as to content were those founded at Halle by August Hermann Francke (1663-1727), the leading representative in education of a religious movement which arose in his Institu-Germany during the closing years of the seventeenth century. Convinced that Protestantism had fallen into a lifeless formalism, several Lutheran theologians inaugurated a religious reform, having for its purpose to make of religion a matter of feeling rather than an affair of the intellect. One of the reformers, Philip Jacob Spener (1635-1705), a pastor in Frankfurt, organized at his home a series of religious gatherings which were called collegia pietatis,1 and soon spread throughout Germany. Francke, the spiritual successor of Spener, had had a rather stormy career as a minister and teacher before he finally settled at Halle, where he had been appointed professor of Greek and Oriental languages at the newly-founded university, and pastor in the suburb of Glaucha. There he spent the last thirty years of his life organizing his famous Institutions. The first one of these, an Armenschule (school for the poor), was founded in 1695; then followed in rapid succession a Bürgerschule or people's school, a Waisenanstalt or orphanage, a Pädagogium or secondary school for the sons of the wealthy, a Lateinische Hauptschule or Latin school for the brighter boys in his elementary schools and a Höhere Töchterschule (higher school for girls) in which girls might receive the same secondary instruction as boys did. In 1697 a Seminarium Præceptorum, the first training school for teachers in Protestant Germany, was added to the Institutions and in 1701 a Realschule founded by Semler, Francke's colleague, became a part of the establishment. At the time of Francke's death his Institutions contained more than twenty-two hundred pupils and over three hundred teachers and assistants. Other additions, among them a printing press, a bookstore and bindery brought the number of Institutions to twenty-five, conducted in a large group of

Francke and

¹ Hence the name pietist first applied in derision to the followers of Spener.

buildings erected for the purpose. The aim of all these Institutions was both religious and practical.1 Francke's purpose was to train children in virtue through piety, and to prepare them for their callings in life. Pietism was emphasized in all the Institutions and the course of studies in each was drawn according to the principles of sense-realism. Thus in the Bürgerschule there was given instruction in history, geography and animal life, in addition to the traditional subjects; in the gymnasium, history, geography, mathematics and French were added to the religious and linguistic studies; the Pädagogium was provided with a workshop, botanical garden and laboratories for the study of the natural sciences. These Halle Institutions exerted a wide influence in all German lands.² While their religious purpose was soon, more or less, lost sight of, they became for the Germans a sort of object lesson; their success led to a widespread criticism of the existing schools; they showed what could be done to prepare for life those who did not intend to enter the traditional professions, but a business career. In 1742 Julius Hecker (1707-1768), who had been a pupil and later a teacher in Francke's Institutions. brought to Berlin, in a slightly modified form, the real school (Realschule) founded at Halle by Semler. Besides religion, German, French and Latin, the subjects taught in that school were ethics, history, geography, mathematics, drawing, mechanics, bookkeeping, architecture, agriculture, manufacture and mining. So well did this institution prosper that in a short time it received official recognition as the Royal Realschule of Berlin and was copied in many parts of Germany.

The first real school.

The response of the universities to the scientific movement was for a long time negligible. No change worth mentioning occurred in the teaching of the law and theological faculties. Everywhere, all through the seventeenth and the greater part of the eighteenth century, their work practically remained what

Sense-realism in the universities.

¹ See Richter, A., August Hermann Francke, in Neudrücke Pädagogischer Schriften, Pt. X.

² Ibid.

it had been in the sixteenth. In the faculty of arts or philosophy, as it began to be known in some places, there was offered, in addition to lectures in Latin, Greek and Hebrew, the traditional course in Aristotelian philosophy, with, here and there, a little admixture of new subjects. Descartes' philosophy in France, Bacon's in England, had begun to be taught before the close of the seventeenth century; mathematics assumed everywhere greater importance and the study of physics was fostered in some universities. Dissection and the study of botany had become the general practice in the faculty of medicine by the beginning of the eighteenth century. Even then, however, the interest of professors and students in the "new" subjects was still very slight. The only institution of higher learning to respond fully to the "new spirit" was the University founded at Halle in 1694, largely by way of protest against the conservatism of German universities. The teaching of the classical languages was reformed, a new philosophy took the place of Aristotle's, the natural sciences were introduced and German, instead of Latin, was made the language of the class-room. In 1737 the University of Göttingen was reformed along the same lines as that of Halle and it became a second center from which the "new spirit" spread to other German universities.

QUESTIONS FOR DISCUSSION

- 1. To what extent were Erasmus and Vives realists?
- 2. Compare the educational opinions of any early humanist with those, (a) of the verbal realists, (b) the social realists, (c) the sense-realists.
- Compare the mediæval view of realism and that held in the seventeenth century.
- 4. What principles of the "innovators" would you hold to be valid?
- 5. Discuss Milton's definition of education.
- 6. Compare Comenius and Montaigne.
- 7. To what extent would Montaigne's views be valid to-day?
- 8. Account for the slow development of scientific studies in the seventeenth century.
- 9. Discuss the relative educative values of humanism and realism.
- 10. Compare the work of any eighteenth century university and that of a modern university.

SOURCES

Bacon, F., Philosophical Works.

Comenius, J. A., Great Didactic; Orbis Pictus. Locke, J., Some Thoughts Concerning Education; Conduct of the Understanding.

Milton, J., Tractate of Education. Montaigne, M. E., Essays.

Mulcaster, R., Elementarie; Positions. Rabelais, F., Pantagruel and Gargantua. Ramus, P., Dialectique.

Richter, A., Ratichianische Studien, and, August Hermann Francke, in Neudrücke Pädagogischer Schriften.

REFERENCES

Adamson, J. W., Pioneers of Modern Education.

Barnard, H., American Journal of Education, Vol. V and VI.

English Pedagogy.

German Teachers and Educators.

Browning, O., History of Educational Theories.
Laurie, S. S., Educational Opinion Since the Renaissance.
Pace, E. A., Bathe and Comenius, in Catholic University Bulletin, Vol. XIII, p. 354.

Paulsen, F., German Education. Quick, R. H., Educational Reformers. Turner, W., History of Philosophy.

Willmann-Kirsch, Science of Education. Woodward, W., Education During the Renaissance.



A SCHOOLMASTER

CHAPTER X

CATHOLIC EDUCATION

IN THE SEVENTEENTH CENTURY



EW Religious Organizations. The foundation of new religious organizations, chiefly teaching congregations, which had been inaugurated in the sixteenth century, continued unabated during the seventeenth. The "Congregation of Notre Dame" was founded in 1598 by St. Peter Fourier

for the education of poor girls. The Order spread rapidly in France, and in 1657 was introduced, with some modifications, Sisterhoods. in America (see Chapter VII). Another branch of the same Order, the "Congregation of the School Sisters of Notre Dame," was organized in Bavaria at the beginning of the nineteenth century along the lines of St. Peter Fourier's Constitutions, with modifications demanded by the needs of the times. In 1847 the congregation was introduced in the United States, where they are to-day in charge of many parochial schools and orphanages, schools for the Indians and Negroes, and an institute for the deaf-mutes; they also conduct several academies. high schools and colleges. The Nuns of the Visitation of Mary (Visitandines, Salesian Sisters) were founded in 1610 by St. Francis de Sales and St. Jane Frances de Chantal. Though contemplatives, the Visitandines have, in some localities, opened boarding schools for girls; such, for example, is the case of the Georgetown Visitation convent, where an academy was opened as early as 1799.

The Congregation of the Sisters or Daughters of Charity was founded in 1633 by St. Vincent de Paul (1576-1660). whose name is sometimes added to the title of the Order to distinguish it from other communities of Sisters of Charity. who, more or less, follow the same Rule, but are independent of the original congregation. St. Vincent's original purpose, it seems, was nothing else than the organization of works of mercy among the poor, first in his own country parish, later in other rural districts and finally in Paris. In 1641 the members of the organization were authorized to take simple vows. During the last hundred years the growth of the congregation has been most extraordinary; it numbers to-day some 25,000 members, scattered all through the world, and engaged in all kinds of works of mercy for the poor, among which teaching holds a prominent place. The first community of Sisters of Charity in the United States was founded by Mother Elizabeth Ann Seton at Emmitsburg, Maryland (1809). This community, which to-day numbers more than 1,700 members, is under the jurisdiction of the Motherhouse in Paris, has adopted the French habit and the Rule of St. Vincent in its entirety. Two independent branches of the Order were also founded in the United States during the nineteenth century: the Sisters of Charity of Mt. St. Vincent-on-the-Hudson, New York, and the Sisters of Charity of St. Elizabeth, New Jersey. Both congregations are in charge of various charitable institutions, but their principal work is teaching; they conduct many parochial schools and academies and both have a very flourishing college, Mt. St. Vincent-on-the-Hudson, and St. Elizabeth at Convent Station.

The Lazarists.

The Lazarists, or Vincentians or Paules, more properly called "Congregation of the Priests of the Mission," were founded in 1625 by St. Vincent de Paul for the purpose of preaching the Gospel among the infidels and poor people of Christian countries, of teaching in seminaries and conducting retreats in preparation for ordination. The Institute of Mary is the official title of several communities of women bearing different names, according to the country where they were established, "English Ladies," "English Virgins," "Loretto Nuns," whose members devote themselves to the education of girls in various types of schools, as also to the care of orphans.

Other Sisterhoods. The original congregation, founded in 1609 by Mary Ward. under the name "English Ladies," was suppressed in 1630, but it was reorganized later and received the approbation of the Holy See in 1703. The Daughters of the Presentation, founded in 1627 by Nicholas Sanguin, bishop of Senlis, France, did not survive the French Revolution, but the Sisters of the Presentation of the Blessed Virgin, founded in 1684 by Venerable Marie Poussepin at Sainville, France, for teaching and the care of the sick, has remained, to the present day, a flourishing congregation. The Daughters of Providence, founded at Paris in 1643 by Madame Polaillon for the protection and the instruction of young girls, became a model for congregations established to carry on works of charity, including education, not only in France, but in other lands. The Sisters of Mercy of St. Charles Borromeo, originally a pious association of ladies founded in 1626 for the care of the sick, were organized in 1652 into a religious congregation devoted to the service of the sick. Its work has much expanded since; it includes to-day the direction of all kinds of charitable institutions and the Order has branched off into several independent organizations. The congregation of the Sisters of St. Joseph, founded at Le Puy, France, by the Reverend Jean Paul Medaille, a Jesuit, for the Christian education of girls, was the forerunner of many congregations bearing the same name and having the same aims, founded in the last one hundred years.

The French congregation of the Oratory, or Oratorians, The founded in 1613 by Cardinal de Bérulle, was extensively en-Oratorians, gaged in educational work, though teaching was not the sole aim of the Order, nor even its primary purpose. Like its Italian namesake1 and model, the congregation was composed solely of priests bound by no other vows than those of the priesthood and having for their chief aim "the perfect fulfilment of their priestly functions." From its very inception,

¹ The Fathers of the Oratory founded at Rome in 1575 by St. Philip Neri. This congregation also became a model for the English Oratorians founded in 1847 by Cardinal Newman,

the Order was led to take charge of many diocesan seminaries and secondary schools, notably the Collége of Juilly. In their conduct of seminaries the Oratorians earnestly endeavored to observe the regulations of the Council of Trent. The management of their colleges was, in the main, patterned after that of the Jesuits, but the curriculum shows, in some respects, a decided departure from the prevalent practices, due perhaps to the influence of realism or that of the Port Royalists, with whom, it seems, the Oratorians were for a time on very friendly terms. Language study began with the vernacular, Latin becoming obligatory only in the fourth year; history and geography were taught as separate subjects, independently of the study of the classics; mathematics and the natural sciences received earlier and greater attention than was the custom in other institutions. In most of their colleges, there was also given a course in philosophy, which, however, was not always free from Cartesianism. After the suppression of the Society of Jesus, many of its schools passed under the control of the Oratorians, who thus became, for a time, the leading teaching Order in France. Like every large congregation, the French Oratory has given to the Church many distinguished members, among them the philosopher Malebranche, the preachers Massillon and Mascaron, the theologian Thomassin, who also produced works on history, ecclesiastical antiquities, liturgy and a series of methods on the study of the languages and philosophy. The Sulpicians were founded by Jean Jacques Olier (1608-1657), a saintly priest, who was then pastor of St. Sulpice in Paris, for the training of teachers and directors in diocesan seminaries. The Society, according to the founder's aim, was not to be organized into a religious congregation, but as a community of secular priests, who were bound by no special vows, living a common life and having for their sole aim sacerdotal perfection in their own lives and its promotion in the lives of others. The Sulpicians have played an important part in the religious life of France and in that of many dioceses in the New World. As early as 1657 they came to

Sulpicians

Canada as missionaries, and in 1791 they opened, in Baltimore, the first seminary in the United States. A religious association which is very similar in organization and purpose to the Oratorians and Sulpicians is the Society of Jesus and Mary, more commonly known as Eudists, from the name of their founder, Jean Eudes, who established it in 1643.

The "Port Royalists," or "Gentlemen of Port Royal," as they were known in their own time, exerted a deep influence upon French religious life, French literature and education. They derived their name from the abbey of Port Royal, a Origin. Cistercian community of women founded in 1204 in the valley of Chevreuse, near Paris, and reformed in 1608 by Mother Angélique Arnauld, aided by St. Francis de Sales. In 1636 Du Vergier de Hauranne (1581-1643), better known as abbé de Saint Cyran, became the spiritual director of the community, which had been transferred to Paris. He was a friend and supporter of Cornelius Jansen, Bishop of Ypres (Cornelius Jansenius Yprensis, 1585-1638), who had erroneously drawn from the teachings of St. Augustine a doctrine of Divine Grace very akin to the tenets of Calvinism. Whereas the Catholic Church teaches that both free will and Divine Grace co-operate in the work of salvation, Jansenius and his followers practically suppressed free will and were led to teach the heartless. distressing doctrine of predestination, which condemns millions of men to damnation. Saint Cyran soon made Port Royal a stronghold of Jansenism, the center of a "New Church," from which spread to other convents and many members of the clergy and laity the principles of an exaggerated moral rigorism. The old abbey of Port Royal in the Fields (Port Royal des Champs) was raised from its ruins in order to shelter the solitaires, a community of pious men who were not bound by any vow, but came to Port Royal in order to live there in retirement a life of study and prayer.

As early as 1638 the Port Royalists turned their attention The Little to education, but their "Little Schools" (Petites Ecoles) did not Schools

really develop until 1646, first in Paris and later at Port Royal

in the Fields. Aside from the rigoristic discipline of the congregation, no innovations worth mentioning were introduced by Port Royal into the education of girls, as one may gather from the Regulations of Jacqueline Pascal, for the girls' schools. More worthy of note were the boys' schools established by the Port Royalists. Each school received only a very limited number of children, usually twenty to twenty-five, admitted at the age of nine or ten and kept at school for six or seven years. Each master was in charge of five or six boys, whom he was constantly to supervise. Curiously enough, the moral pessimism of the Jansenists, their distrust of human nature, their conception of its radical wickedness, instead of leading to undue severity, inspired them only with pity for the moral weakness of the child. Through constant watchfulness, they sought to forestall the necessity of punishing, though they would never hesitate to dismiss any pupil whose example might be dangerous for the others. On the other hand, this same diffidence of human nature led the solitaires into strange pedagogical aberrations. Any familiarity, however innocent, was sternly frowned upon; children at all times were expected to behave with the gravity and dignity of "little gentlemen." Worse still, through their fear of awakening pride, the Port Royalists studiously avoided any appeal to emulation, were it nothing else than a word of praise. As was to be expected, indolence and indifference to study were quite common in the "Little Schools."

and their moral rigorism.

In some respects the Port Royal curriculum and methods of teaching were a departure from the prevalent practice of the times. The study of language began with that of the mother tongue, a more rational way of procedure, it was held, than starting with Latin; but since the vernacular contained as yet no literature that would answer the purpose, the pupils were given to read translations of easy Latin prose. The method had the advantage of providing a rather easy and pleasant introduction to Latin. When there had been devel-

Pedagogical innovations.

oped in this way a desire for the reading of good works, the study of Latin was taken up; grammar was reduced to the minimum requirements; it was taught in the vernacular and illustrated from the authors that were actually read. Elegant translation into the vernacular was always insisted upon. Greek was studied by the same method as Latin. Much has been said of the importance attached by the Port Royalists to the training of judgment and reason, but such, no doubt, was the aim of other educators of the same period, though they used different methods. Though some attention was given to science, especially mathematics, in the Port Royal schools, the curriculum was, on the whole, literary, and it was valued as a means for intellectual growth and development rather than for its own intrinsic worth. Another pedagogical innovation of the Port Royalists which is worth mentioning is their method of spelling: "What makes reading more difficult," says Arnauld, "is, that while each letter has its own proper name, it is given a different name when it is found associated with other letters it is best, therefore, to teach children to know the letters only by the names of their real pronunciation, to name them only by their natural sound."1

The "Little Schools" were closed in 1660 by order of Louis XIV less than a generation after their opening, but their influence did not cease then; it was continued for a long time afterwards through the writings and particularly Port Royal the text-books of the leaders. Antoine Arnauld (1612-1694), literature. in his Regulations of Studies, gave an exposition of the methods used at Port Royal in the teaching of literature. He also seems to have been the chief contributor in the composition of the text-books used in the "Little Schools." The Port Royal Logic, for the most part a plea in favor of Descartes' philosophy, was produced by him with the aid of Pierre Nicole (1625-1696), while the Port Royal Grammar was composed in collaboration with Claude Lancelot (1615-1695). To Arnauld is also attributed an Elements of Geom-

¹ General Grammar, chapter VI.

etry, which was highly prized by the mathematicians of the times. Lancelot also wrote New Methods for the study of Latin and Greek and a Garden of Greek Roots. Varet published a treatise on Christian Education, Nicole on the Education of a Prince and Coustel drew up his Rules for the Education of Children. The influence of Port Royal is also seen in the Treatise on Studies (Traité des Etudes) of Charles Rollin, twice rector of the University of Paris.

St. John Baptist de la Salle.



St. John Baptist de la Salle

The Institute of the Brothers of the Christian Schools was founded by St. John Baptist de la Salle (1651-1719), a doctor of theology and canon of the metropolitan church of Rheims. Shortly after his ordination to the priesthood, the saint, in order to carry out the testament of his spiritual director, Nicholas Roland. had undertaken the task of consolidating a newly-founded congregation for the education of poor girls.

In this position he came to realize the ignorance of the masses and the trying conditions under which elementary school teachers had to labor, but he had as yet no intention of founding a teaching congregation of men. "If I had ever

¹ This book contains an interesting criticism of Comenius' *Janua Linguarum*, which has been referred to before. See p. 218.

thought," he says in a memoir, "that what I did out of pure charity for the poor school teachers would make it incumbent upon me to live with them, I would have given it up at once." The call to his life-work came to St. de la Salle in 1679, when he received a request to come to the assistance of a zealous layman, Adrien Nyel, in the opening of a school for poor boys. He generously responded and shortly afterwards was again instrumental in the opening of another free school. He was thus gradually and almost unconsciously drawn closer and closer to the teachers of the poor and made to know their needs and their struggles. His sympathy first prompted him to visit them daily in order to bring them encouragement and guidance; later he provided them with dwellings, and otherwise helped them financially; finally he received them in his own household that he might be able to assist them more directly. In 1683 he resigned his canonry and soon afterwards distributed his fortune among the poor in order to be free from all worldly cares and be able to devote himself entirely to the little community who now looked to him as their spiritual father and superior. The Institute was then virtually founded; a tentative Rule was formulated, which bound the Brothers to obedience for one year, and the first regular novitiate for the training of the members of the Institute was opened (1684). A little later, St. de la Salle inaugurated at Rheims what was really the first school for the training of lay teachers. In 1688 he personally opened the first schools of his Institute in Paris and a few years later his first boarding-school, intended at first for the education of the sons of the Catholic Lords who accompanied James II in his exile. It was also in Paris that the Brothers inaugurated industrial training, the work of reforming the wayward, and the Sunday School, the latter for boys already working and who could not, therefore, attend school on week-days.

Trials of every kind came to the Founder in the last twentyfive years of his life; most painful to him was the opposition, at times very bitter, he met on the part of ecclesiastics who Spread of the Institute.

did not approve of his work. In 1702, as a consequence of misrepresentations and calumnies, he was even deposed by Cardinal de Noailles, but he was reinstated shortly afterwards. The Institute received its permanent organization in 1717, in a General Chapter convoked for the purpose and to the Saint's great satisfaction Brother Barthélemy was elected Superior General. The Order was approved by the Holy See as a religious congregation in 1725, six years after the death of the Founder. At that time there were in the Institute twentyseven houses with two hundred and seventy-four Brothers, instructing nine thousand, eight hundred and eighty-five pupils; at the French Revolution, when the Order was suppressed, there were nine hundred and twenty Brothers distributed in one hundred and twenty-three houses and instructing thirtysix thousand pupils. Restored in France in 1802, the Institute soon regained its former importance in the field of Catholic education. In 1821 it numbered nine hundred and fifty Brothers, three hundred and ten schools, six hundred and sixty-four classes and fifty thousand pupils. In 1900, prior to the legislation abolishing religious congregations in France, there were more than ten thousand Brothers conducting two thousand and fifteen establishments scattered all over the world: fifteen hundred elementary schools or high schools, forty-seven boarding schools, forty-five houses of training for members of the Institute, six normal schools for lay teachers and one hundred and forty-three agricultural, commercial and trade schools or courses of various grades.

Its organization

The government of the Institute is in the hands of a Superior General elected for life by the General Chapter and aided by assistants; he appoints the visitors in charge of districts and the directors of individual houses. Admission into the Institute usually takes place between sixteen and eighteen. The aspirant first goes through a period of spiritual preparation and probation lasting one year; he is then admitted into the scholasticate to receive his professional training, the length of which depends on the position to which he is to be assigned.

The Brothers take the three usual vows of poverty, chastity and obedience, to which they add the vow of stability in the Institute and that of teaching the poor gratuitously, which the Founder considered as the very raison d'être of the Institute, so much so, that in order to attach the Brothers permanently to the education of the poor, he forbade them to teach Latin. No priest can become a member of the Institute.

The plan of studies for the elementary schools conducted by the Brothers is worked out in the Conduct of Schools studies. originally drawn up by St. de la Salle, but somewhat modified later to meet changes in educational content and procedure. The subjects originally taught in the elementary schools of the Order were religion, reading, writing and arithmetic. Instruction was given in the vernacular which is the language, St. de la Salle held, that elementary school pupils can master with profit and some degree of ease. Neatness and thoroughness of work was everywhere insisted upon; much importance was attached to good penmanship, in which the Brothers' pupils have ever been proficient. Spelling and composition were an integral part of language training and were much insisted upon. "The teacher," says the Conduct, "will require the pupils to compose and write for themselves notes, receipts, bills, etc. He will also require them to write out what they remember of the Catechism and what has been read to them."2 The teacher was to explain what was to be done, to ascertain by frequent questioning whether the class had understood and retained, and to use, whenever possible, the inductive method of teaching. In arithmetic, for instance, he must require the pupil "to produce a certain number of rules that he has discovered for himself." All these regulations may seem to us a commonplace to-day, but in St. de la Salle's time, when learning by rote was the common practice, they were a tremendous advance. Then, too, in striking contrast to the noisy classrooms of the time, the rule of silence was rigidly enjoined

¹ Published for the first time at Avignon in 1720.

² Conduct of Schools, Part II, chapter II.

in those of the Brothers; the teacher was advised by the Conduct to speak in a low tone of voice and, whenever possible, to use signals instead of words. The discipline, as compared with the common practice of the time, was very mild; punishments were inflicted, but they were not left to the discretion of the teacher; the Rule minutely described when and how and by whom they should be inflicted. From the very beginning of school-life much importance was attached to training in polite behavior, for which the Founder composed, in the form of readers, The Duties of a Christian and The Rules of Politeness. Above all, the atmosphere of the school was to be thoroughly religious. Each class-room had its crucifix and holy pictures; morning and afternoon sessions were opened and closed with appropriate prayers and at stated times during the class or study period the pupils were reminded of the presence of God by a brief ejaculatory prayer. Half an hour daily was devoted to the catechism and the Rule insisted on the reception of the Sacraments, attendance at Mass and other religious exercises. In all this, St. de la Salle was more or less following the example of the Catholic schools of his time. His originality lies in two epoch-making pedagogical innovations, the simultaneous method and the normal school for lay teachers.

The simultaneous method.

The simultaneous or class method of teaching is based on the grading of children according to intellectual capacity; those of the same grade use the same books, receive all at once the same instruction and recite the same lesson before the whole class. This procedure, which seems quite natural to-day, was a pedagogical revolution in St. de la Salle's time, when the common practice was the individual method of teaching and recitation; each individual pupil went to the teacher's desk to receive instruction or to recite, while the others were occupied with some task under the supervision of monitors. St. Peter Fourier (1565-1640), founder of the Congregation of Notre Dame, seems to have been the first one to apply the principle of the simultaneous method in the elementary schools; Come-

nius (1592-1671) refers to it in his Didactica Magna; Bishop de Nesmond (1629-1715), in his Method for the Instruction of Children, advised the division of each class into groups "in order that all the children of the same group or bench may receive the same lesson;" Father Charles Demia (+1689), founder of the Brethren of St. Charles, had formulated a plan similar to that of Bishop de Nesmond and the anonymous author of the Advice Concerning the Little Schools1 recommends the use of the simultaneous method. The merit and originality of St. de la Salle in this matter lie in his having put the simultaneous method on a workable basis, in having extended its use to the teaching of all the branches of the curriculum and perfected it in its details.

We have seen in the preceding chapter that Mulcaster in his Positions suggested a professional training for elementary school, school teachers, but his suggestions passed unnoticed. The teaching congregations provided such a training for their members, but to St. de la Salle belongs the honor of having founded (1684) the first normal school for lay teachers in elementary schools. Before the close of the seventeenth century, the institution was introduced in Brussels by Des Roches and in Halle by Francke.

Two remarkable contributions to the education of women were made in France during this period: Fénelon's Treatise on the Education of Girls and the foundation of St. Cvr by Madame de Maintenon. Fénelon² wrote his treatise at the request of the Duke and Duchess of Beauvilliers, who had five daughters to educate. He had already had some experience in educational matters when he prepared this remarkable little book. A few years after his ordination, he had been appointed spiritual director of the house of New Catholics (Nouvelles Fénelon

¹Petites Ecoles, the term commonly applied to the elementary schools of this period. See p. 235 ff. for the sense in which the Port Royalists used that term.

² François de Salignac de la Mothe-Fénelon (1651-1715), archbishop of Cambrai.

Catholiques), a convent founded for the education of Protestant young women who were contemplating becoming converts to the Catholic faith. In this rather delicate position, Fénelon had displayed remarkable resources of tact, persuasion and theological knowledge. In framing his plan of education for girls, Fénelon is guided by a two-fold principle: woman's vocation and her nature. The position of woman in the family and society will tell us what her education should be; the method we should follow is dictated by her nature, which should be assisted, developed and, when need be, restrained and corrected. The treatise, though not formally so divided, consists of three parts. The first two chapters are devoted in the main to a criticism of existing conditions in the education of women; in the next six chapters, the author lays down the principles which should govern the education of children, whether boys or girls. The last five chapters are exclusively devoted to women and their education. As wife and mother, says Fénelon in substance, woman has important duties incumbent upon her in the home; she has no less important duties to fulfil in society and she should be prepared to meet all the exigencies awaiting her; her education is just as necessary as that of man. The reasons which are commonly adduced for its neglect are nothing else than prejudices. Education, if it be of the right kind, will not, as some people seem to apprehend, make a woman vain and pedantic, but prepare her for the position that is hers in domestic life and society. Woman, it is said. cannot be highly educated because she is weaker than man in body and mind, but if that be the case, all the more reason to strengthen her in body and intellect through a solid training. Besides, has not woman been redeemed like man by the blood of Christ and has she not, like man, an eternal destiny for which she should be prepared? Fénelon takes a decidedly cheerful and optimistic view of human nature; he is ever ready to trust in its better impulses, and his amiable complacency sometimes leads him a little astray as, for example, when he tells us that we should use precaution in telling the child of his

and the education of girls



faults lest we hurt his feelings. Like Locke, he dwells at some length on the child's early training. He insists on the "management of the child's health," the proper selection of food, the regulations of a simple life which will keep the body supplied with pure blood, the necessity of keeping formal instruction in abevance while the organism is still weak. Attention at this stage is still very unsteady, but by way of compensation curiosity is very strong and Fénelon is fully aware of its educational value. "Children's curiosity is a natural bent, which prepares the way for instruction." We should answer their questions with patience, we should even "show that we take pleasure in them" because they afford us the most natural and, for the child, the most pleasant form of instruction. Even when the child has grown into boyhood and youth, didactic lessons should be the exception. "The less formal our lessons are, the better." Fénelon is a firm believer in the doctrine of interest. ". let us make study agreeable, let us conceal it under the guise of liberty and pleasure, let us allow children to break in sometimes upon the studies with brief sallies of amusement. They need these distractions to refresh their minds." We should make ourselves loved by the child, make him feel at ease in our presence, win his confidence, without which our efforts at education would be of little avail. The art of reading is to be learned in the vernacular and the books used should be beautifully bound and contain interesting. finely-illustrated stories. Formal grammar and rhetoric are to be reduced to a strict minimum; what is needed is not so much rules, but good models. Fénelon is particularly insistent on interest in dealing with the religious instruction of the child. "Every means should be employed to make children realize that religion is beautiful, attractive and impressive, whereas they generally conceive of it as something gloomy, melancholy."2 It is for this purpose, to make religion attractive, that he insists on the use of Scriptural stories and pictures; besides.

¹ Education of Girls, chapter V.

^a Ibid., chapter VI.



he tells us, the very content of the Christian religion suggests this narrative, *i. e.*, historical plan of presentation.¹

The girl's future position as wife, mother, mistress of the household and her social standing determine for Fénelon the nature of the instruction that she is to receive. She should learn the common branches in so far as needed for the education of children; she should be familiar with all that is involved in the management of the home and have some knowledge of the laws governing property. Fénelon also recommends some acquaintance with ancient and national history, classical and modern literature, the fine arts, drawing rather than music, which he distrusts, because it may become the instrument of false sentimentality. Fénelon's imagination, at times, betrays him into the land of the unreal, but, on the whole, his Education of Girls is a little masterpiece of its kind both in content and in form, full of novel views on education, which again and again remind the reader of the modern trend of educational opinion. Fénelon had a remarkable opportunity to apply his pedagogical principles in the education of the Duke of Burgundy, the grandson of Louis XIV, which he directed with remarkable success from 1689 to 1695. This highlygifted but impetuous, intractable young prince, a "born terror," as Saint Simon expresses it, became, under the able hand of his master, a most accomplished young man. It was for this pupil that Fénelon composed his Fables, Dialogues of the Dead, Existence of God and Telemachus.

Madame de Maintenon. Another name inseparably connected with the education of women in seventeenth century France is that of Françoise D'Aubigné, Marquise de Maintenon, the morganatic wife of Louis XIV. In 1686 she founded St. Cyr, a free boarding school for the education of two hundred and fifty poor, young ladies, who, besides, received a dowry from the king when they married or entered a convent. For more than thirty years Madame de Maintenon devoted herself with unabated zeal and

¹ Long before Fénelon, St. Augustine had recommended this style of presentation. See St. Augustine, De Catech. Rudibus, c. 6.

remarkable success to the direction of this institution. Her guiding principle in the education of "her children," as she was wont to call the young ladies at St. Cyr, was the same one as Fénelon in his Education of Girls: to prepare women for their duties as wives and mothers. In her Letters, mostly devoted to education, her Conversations on the Education of Girls, her Counsels to Young Women Who Enter Society, Madame de Maintenon appears to us as a born educator of the first rank, with a keen psychological insight, an admirable tact in dealing with pupils and teachers, a never-failing common sense and complete devotion to her work.

QUESTIONS FOR DISCUSSION

- 1. Discuss Fénelon's contention "that the less formal a lesson, the better."
- 2. Compare the Port Royal with the present-day method of spelling. 3. What is the educational value of the study of formal grammar?

4. When should that study begin? Why?

5. To what extent was the individual method of teaching used in secondary schools and universities in St. de la Salle's time?
6. Compare the condition of elementary education in various coun-

tries in the seventeenth century.

7. Account for the fact that the individual method of teaching was still widely used in the nineteenth century.

Compare present-day and seventeenth century Sunday schools.
 To what extent was Fénelon's conception of the education of girls in advance of his time?

10. What, if any, is the weakness of Fénelon's conception of educa-

SOURCES

Fénelon, Education of Girls.

Heimbucher, M., Die Orden und Kongregationen der katholischen Kirche.

La Salle, St. John Baptist de, The Conduct of Schools. Maintenon, Mme. de, Works, especially Letters.

REFERENCES

Allain, L'Abbé, l'Instruction primaire en France avant la Révolution.

Azarias, Brother, Essays Educational.
Barnard, H., American Journal of Education, III, 437-448; XIII, 477-494; XXVIII, 1-16; XXX, 729-735.

Buisson, F., Dictionnaire de pédagogie et d'instruction primaire.

Cadet, F., Port Royal Education.
Guibert, J., Life and Virtues of St. John Baptiste de la Salle.
Lanson, G., Histoire de la Littérature Française.

Wilson, Mrs. R. F., The Christian Brothers.



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De Studiis et Literis, 40.

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